

2nd January, 2025

INSNA Sunbelt 2025 Conference
Paris, June 23 – 29

Final List of Accepted In-Person Organized Sessions (by order of submission)

If you are unsure where to submit your presentation proposal, the list below can help you find the right session. To do so please browse this document using thematic keywords or names of session organizers. Once you know in which session you wish to present, please use Conftool (<https://www.conftool.pro/sunbelt2025/index.php?page=login>) to submit your title, abstract, and keywords to this session. If you do not find the right organized session, please submit to the session called “Other *please indicate your topic in a remark to the organizer at the bottom of your submission”. Conference organizers will then create new sessions based on presentation proposals submitted to this “Other” category, or assign your proposal to a closest possible existing session.

Yoosik Youm

Exploring Biosignatures and Digital Data in Social Networks and Mental Health

This session invites research that examines the relationship between social networks and mental health. In particular, it encourages submissions that utilize recent measures of mental health, including biomarkers such as brain structure and function, hormones, or genes, as well as digital phenotypes based on data from wearable devices.

Fronzetti Colladon, Andrea; Diesner, Jana; Gloor, Peter; Vestrelli, Roberto; Greco, Francesca

Words and Networks

This session focuses on cutting-edge research at the intersection of text analysis (including discourse analysis, content analysis, text mining, and natural language processing) and network analysis/network science. Work presented in this session explores the study of word networks, socio-semantic networks, and the representation of text-based information as graphs (e.g., knowledge graphs), along with the extraction of network data from text. Research on "Words and Networks" has resulted in prominent studies on topics such as language change, recommender systems, collaborative innovation, semantic computing, and the diffusion of (mis)information in both online and offline environments.

A growing field of interest is the role of artificial intelligence and large language models in understanding social interactions. These models are advancing research on language patterns and behaviors within networks, as well as their implications for social structures and interactions. Another key area is organizational communication, where improved insights into the impact of language within and across organizations have led to actions that enhance employee engagement and client relationships. In the domains of marketing and branding, the application of text mining and network analysis has transformed the understanding of consumer behavior, leading to more targeted communication strategies based on the use of words, ideas, and narratives as networked entities. Additionally, the integration of text mining and network analysis has proven valuable in identifying and connecting social agents, fostering community development, and studying social movements.

We invite abstract submissions that contribute to the integration of text analysis, network analysis, and AI, particularly those exploring new methods, applications, or theoretical approaches. Both basic and applied studies are encouraged.

Francisca Ortiz Ruiz, Nuria Targarona Rifa, Miranda Lubbers

Mixed methods for social network analysis

Social network researchers increasingly use different tools, methods, and methodological perspectives within their projects, a trend seen across many disciplines. This trend is partly associated with the excellent connectivity of knowledge and the rise of open access. Mixed methods approaches allow scholars to obtain shared concepts to make their studies dialogue with each other and also provide a deep understanding of the social phenomena under investigation. Multiple authors have employed mixed methods embedded with a social network perspective (e.g., Bellotti, 2015; Edwards, 2010; Froehlich, Rehm and Rienties, 2020; Hollstein & Dominguez, 2014; Ortiz, 2022; Small, 2011; Verd, 2008), highlighting both opportunities and challenges. In this organised session, we welcome presentations using a mixed methods approach for social network analysis, which can be empirical or methodological. Empirical papers could, for instance, highlight the rationality behind their specific approach to mixing methods, and the opportunities and challenges they faced (e.g., ethical, methodological, theoretical, triangulation, open access data). Methodological papers could propose new tools and software, test assumptions in previous mixed-methods research, or provide a review of previous studies. The session aims to give attendants a good grasp of the state of the art of mixed methods research in social networks.

Lea Ellwardt, Amelie Reiner, Steinhoff Paula

Social networks in the older population

Integration into and support from social networks are crucial for healthy aging and resilience in later life. However, social gerontological frameworks have rarely incorporated network theory and sociometric analysis. In this session, we aim to discuss relevant theories and findings on social networks in old age, including advances in research designs and challenges related to studying social networks among older adults.

Contributions may include, but are not limited to:

- Developing theoretical frameworks and hypotheses related to older adults,
- Tailoring research designs for the collection of network data among older populations,
- Presenting methods for analyzing network data collected from older populations,
- Sharing empirical insights on egocentric and sociometric networks among older adults,
- Exploring intervention ideas, such as those addressing loneliness.

We welcome contributions employing any rigorous research methodology, including quantitative, qualitative, or mixed approaches. Additionally, research may focus on personal networks in late life, such as family or care networks, or on broader social networks, such as those within neighborhoods and local communities.

Rochelle Cote, Steve McDonald

Social Capital and Social Inequality

Social capital is a key factor in social inequality. This session will explore the relationship between social capital and social inequality, examining how disparities in social networks and resources affect access to opportunities and well-being. Social capital, defined as the networks, relationships, and norms that enable collective action, plays a crucial role in shaping individuals' and communities' ability to navigate social, economic, political, and cultural challenges. We welcome papers from all disciplinary and methodological backgrounds and perspectives.

Tomas Diviak, Paolo Campana, Peter Carrington

Crime and Networks

The importance of social networks for analyzing and explaining criminal behavior has been widely recognized. A wide range of illegal activities, such as drug trafficking, human smuggling, or terrorism requires coordination among offenders to be successfully performed. It is not surprising, therefore, that the network perspective on crime has recently gained popularity, both among academics and law enforcement practitioners, as it captures the essence of such activities.

However, the study of criminal networks is challenging. Data collection is difficult in situations where subjects themselves aim not to be detected. Gathering first-hand evidence on such phenomena is therefore extremely difficult, and in some cases dangerous. Scholars have thus relied on police data, such as arrests, or investigative evidence, such as electronic surveillance or phone records, to build an empirical base for their analysis. A second challenge is methodological, i.e. matching/developing the right statistical models based on the specificities of criminal networks to adequately test criminological theories, allowing to move beyond descriptive network measures.

This session is dedicated to innovative research at the intersection of network analysis and criminology. We welcome a wide range of submissions focused on criminal networks, including methodological, theoretical, and empirical studies. Topics may include: collection of criminal network data, testing theories of co-offending, victimizations and violence using network data, case studies of specific criminal groups, and statistical modelling tailored to the complexities of criminal network data.

Keywords: covert networks, criminology, methodological innovation, co-offending, violence, organised crime, illegal markets.

Target group: both applied and methodological researchers interested in criminal network analysis, and law enforcement professionals. This session aims to bridge disciplines, to inspire discussion and collaboration.

Tobias Stark, Lars Leszczensky

Intergroup Relations in Social Networks

There is an increasing interest in social network analysis to better understand intergroup relations in many disciplines. Using ego-centered and whole network data, both cross-sectional and longitudinal network studies have established that social networks are segregated along ethnic, cultural, and religious lines.

In the past years, we have seen exciting new applications of social network analysis that have improved our understanding of the processes behind the emergence of intra- and intergroup relations and the consequences of such relationships, such as intergroup attitudes, group identities, and group-related norms and behavior.

This session invites theoretical, methodological, and empirical contributions that aim to deepen our understanding of the causes and consequences of intergroup relations in social networks.

Manuel Fischer, Ocelik Peter, Hollway James, Diani Mario, Christopoulos Dimitris

Political Networks

We propose an Organized Session on Political Networks. The Session should provide a multidisciplinary space of convergence for scholars that, while holding diverse research interests in the study of politics, policy-making and political behavior share an analytic approach to network processes in political life, coupled with strong attention to the integration of theory and empirical data. Political networks are conceived of in a broad sense - as defined around political actors, events that are relevant to the political biographies of individuals as well

as around the use of digital communication technologies within political dynamics, among others. Thus, ties can consist of exchanges of resources, information, and symbols, as well as of collaborations and communications that may occur both on- and offline. Substantive issues that researchers in political networks have been dealing with are policy networks around climate change on the local, national and international levels, networks of social movement organizations, comparisons of networks across different institutional contexts, or political interactions within new social media, among others. Organized Sessions on Political Networks have been well frequented at past Sunbelt / EUSN conferences, the session is endorsed by the Standing Group on Political Networks of ECPR (European Consortium on Political Research).

Michel Grossetti, Sophie Mützel

The legacy of Harrison White

Harrison White (1930–2024) is a foundational figure in the field of social network analysis. He developed several concepts and mathematical models of social structure that have had a considerable influence on the study of social networks and the discipline of sociology, including structural equivalence, vacancy chains, blockmodels, and production markets. These concepts and models not only advanced an innovative understanding of social structure as patterns of relations. They also lead him to develop a theoretical, relational view of the social world (in Identity and Control). Additionally, his empirical research interests were broad, ranging from kinship studies to social mobility, organizational theory, creativity in the arts, sociology of markets, and the study of language.

This special session, held one year after his death, intends to bring together works that take up, expand, explore, or develop some of his methodological or theoretical contributions. We also welcome proposals on empirical investigations, as long as they clearly link to Harrison White's work. Contributions could discuss or pick up on the various threads of White's oeuvre, for instance:

- the ontology of social networks around notions like identity, story, tie, cultural domain, discipline, institution;
- applications and developments of blockmodel analysis, and other methods for studying structural equivalence;
- modeling of small worlds and relational chains
- styles and identities in the field of art;
- comparisons and connections with other theoretical approaches;
- his market model and economic sociology;
- language and linguistic processes in networks;
- reproduction and dynamics in network processes (e.g., switching, action).

Please send an abstract of no more than 500 words to Michel Grossetti (michel.grossetti@univ-tlse2.fr) and Sophie Mützel (sophie.muettel@unilu.ch).

Yanjie Bian

Guanxi Networks

This session is designed for presentations of the most recent research on guanxi networks. Research problems are not limited to the contents, structures, and dynamics of guanxi networks themselves but also concern their roles in social, economic, and political spheres. Studies that offer new perspectives, methods, and/or findings are welcome to be submitted, as are theoretical and empirical submissions. Targeted submissions from China and around the world.

Louis Michael Shekhtman, Alexander Gates, Dikla Yogev

Networks, Philanthropy, and Social Impact

This session will explore how network analysis can deepen our understanding of the science of philanthropy and its social impact.

Advances in computing, combined with expanded releases of data from government and non-profit sources, have opened up unprecedented opportunities—and challenges—in constructing large-scale networks that map the complex philanthropic landscape.

These developments allow for more detailed analyses of charitable activities, funding flows, strategic relationships, patterns of influence, diffusion of policy, and assessments of equity and access, while also allowing us to measure social and scientific impact, and evaluate the effectiveness of foundation portfolios and strategies.

This session will invite contributions leveraging network analysis to examine the structure, dynamics, and impact of the philanthropic ecosystem.

We welcome innovative approaches to network data and analysis, applications of social network theory, and insights from practitioners in the field.

Lijun Song

Singlehood and Social Networks

The global single population is increasing, raising important questions about its implications for social networks and health outcomes in both scholarly debates and public and political discourse. This session invites papers that explore the relationship between singlehood and social networks, as well as the health impacts of social networks among single adults or between single and partnered adults. We define singlehood broadly to include individuals who have never been legally married, as well as those who are separated, divorced, or widowed. We welcome papers that compare single individuals with their partnered counterparts, as well as those that examine the heterogeneity within the single population.

Marina Hennig

Networks, social resources and subjective well-being

This session focuses on papers that analyze resources embedded in social networks which are indispensable to produce subjective well-being. During their life course persons are embedded in ever changing networks. What these networks have in common is that a broad set of resources – material, affective or cognitive – is embedded in them. A multitude of research tasks can be derived from that observation. Identifying the composition of resources necessary to secure well-being, creating resource-oriented network typologies or analyzing the requirements of resource access, to only name a few options. However, the extent to which social resources are integrated into networks also depends on culture and traditions and can therefore vary between societies in their importance for well-being.

An approach that is focused on resources within networks can tackle questions ranging from life course analysis to social inequality and beyond.

Research work – be it quantitatively or qualitatively oriented – that is concerned with subjective well-being and the resources necessary for obtaining it, is highly welcome. Theoretical and/or methodological contribution from all relevant fields (e.g. sociology, economy, anthropology, medicine, psychology, educational sciences, statistics etc.) is desired.

Frederick Kin Hing Phoa

Recent Advances in Statistical Analysis and Mathematical Modeling of Large-Scale Network Data

In the current big-data regime, a large-scale social network, despite its sheer size and complexity, has received much attention from researchers of many different fields, including social sciences, network sciences, economists and statisticians. The grand aggregation of knowledge contributions from these fields generates many inspiring outcomes for this interdisciplinary research area. This organized session aims at introducing recent advances in the statistical analysis and mathematical modeling in large-scale network data, and their applications in social networks and scientific networks. It is expected to gather experts to discuss recent advances in sociology, information science and statistics, and to analyze the networks from different point of view. The topics include, but not limited to, network structure characterization, network data analysis, network dynamics, network modeling, network data visualization, real-life applications and so on.

Zhen Zhu, Ching Jin

Online Health Communities

As online health communities (OHCs) become increasingly popular worldwide, network analysis offers powerful insights into the social, informational, and behavioural dynamics within these digital ecosystems. This organised session invites papers that apply network analysis methods to understand the structure, functionality, and impact of OHCs, aiming to highlight the unique contributions of network perspectives to both the academic study and practical management of health communities.

This session invites theoretical, methodological, and empirical contributions that leverage network analysis methods to advance our understanding of online health communities. Papers from diverse disciplinary backgrounds are encouraged to offer new perspectives and methodologies for examining the structure and dynamics of OHCs. This session welcomes papers exploring a range of network analysis approaches and applications on OHCs, including but not limited to:

- Social Network Structures and Influencer Roles in OHCs
- Information Diffusion and Misinformation Containment in OHCs
- Informational and Emotional Exchange Patterns
- Longitudinal Network Analysis in OHCs
- Multilayer Network Analysis in OHCs
- Network-Based Predictive Modelling for Health Outcomes

Raja Kali, Zhen Zhu, Charlie Joyez, Anastasia Mantziou, Sudipta Sarangi

Networks in Trade and Finance

Networks are everywhere. Global trade, supply chains, financial markets, the World Wide Web, professional and social communities are examples of interconnected systems that are important to the structure and function of the modern world. Networks are a general yet powerful means of representing patterns of connections or interactions between parts of such systems. The network approach facilitates an understanding of mechanisms and reveals patterns in the data that are difficult to see using other approaches. With this as the leitmotiv, this session aims to bring together a group of researchers in the related areas of economics and finance, with the following goals:

- Demonstrate the value of the network approach for generating novel insights into these areas.
- Foster a cross-disciplinary exchange of ideas and methods within the field of researchers in these areas.

- Explore the potential for real-world applications of the network approach that will be of value to practitioners in various fields of business and government, such as finance, logistics, healthcare, transportation, communication, economic development, and social media.

Roy Barnes, Joshua Murray, Mohamed Oubenal, Roberto Urbani

Corporate Networks

This session highlights the study of the role of social networks in consolidating the dominant position of business and economic elites. Applicants are invited to submit papers that use social network analysis at either local, national or transnational level. We're particularly interested in research offering insights into the social attributes of dominant economic elites and their interdependencies with the political sphere through think tanks, clubs and informal groups. We also welcome papers that offer new empirical perspectives or analytical tools to understand how corporate networks are embedded into non-corporate forms of sociability, thus facilitating the connection of the economic realm with other social spheres. Papers may also explore how interlocking directorates help understand the transformation of business elites, especially when they are confronted with socio-political or financial crises. Finally, the session welcomes innovative approaches that combine social network analysis with qualitative or other quantitative methods (multiple correspondence analysis, sequence analysis, etc.).

Possible Keywords:* corporate networks, economic elites, interlocking directorates, policy groups, social clubs

René Veenstra, David Schaefer, Carolyn Parkinson

Social Networks in Childhood, Adolescence, and College

This organized session focuses on social network analysis to understand how peer relationships impact the social development and well-being of children, adolescents, and college students. Given the significant time spent with peers, these relationships shape—and are shaped by—behaviors and attitudes. We welcome empirical, methodological, and theoretical papers on social networks in these age groups, including topics such as:

1. Social network analysis of peer selection and influence in childhood, adolescence, and emerging adulthood, offline and online
 2. Contextual influences on networks, such as social norms, teaching practices, and school structure, with advances in multi-level modeling
 3. Social neuroscience and networks, including neural, psychological, and cognitive aspects of connections and their impact on health and well-being
 4. Network interventions, including feasibility studies and trials evaluating peer-led approaches
- Submissions on different peer relationships (e.g., friendship, admiration, dislike, bullying, avoidance) and innovations in the measurement and analysis of social networks are encouraged.

Elisa Bellotti

Gender and Social Networks

Social network research studies the mechanisms that drive formations of network structures as well as the outcomes of such structures on social behaviour. A well investigated area of research focuses on gender differences in network formations and outcomes in personal and professional networks. Researchers have looked, for example, at the different styles of socializations of boys and girls in early age, varieties of gendered network structures in different cultures, gender differences in peer networks and educational outcomes, gendered structural and cultural constraints of network strategies in organizational studies, different network positions and relational strategies between men and women at work, gender unbalance in academic networks and interlocking directorates.

This session wants to bring together interdisciplinary perspectives on gender similarities and differences in social networks which might be investigated with a variety of methods and modelling techniques. We welcome both highly quantitative modelling studies as well as qualitative research that looks at how discourses and narratives may impact the relational strategies embedded in network structures. We also welcome research that expand the very definition of gender to investigate peculiarities and differences of LGBT social networks.

Topics of the session might include, but are not limited to:

- Gender differences in structure and composition of personal networks
- Gender differences in tie formation in early life
- Gender dynamics in educational settings
- Gender and social support over the lifetime
- Gender, social capital and brokerage
- Gender differences in interlocking directorates, academic networks and organizational studies
- Gendered narratives in relational strategies
- Gendered perceptions of SNA

Jack Wippell

Unraveling the Networked Roots of Extremism

This session will explore the intricate social and structural connections that underpin extremist groups and movements. We invite submissions that interpret this theme broadly, including but not limited to: the processes through which extremist networks radicalize individuals, recruit members, mobilize resources, and orchestrate their activities. Contributions examining the intersecting roles of digital and physical infrastructures, group cohesion mechanisms and inter-organizational alliances, and the influence of socio-political contexts on extremist strategies are particularly welcome.

Spyros Angelopoulos, Francesca Pallotti, Olaf Rank, Paola Zappa

Organizational Networks

The networked nature of organizations creates a complex ecosystem where individuals, groups, units, and other organizations are entangled. Such an entanglement shapes organizations in a dynamic way and affects their outcomes at multiple levels. This session aims to bring together studies on organizational networks addressing antecedents, dynamics, cross-level processes, and outcomes. Submissions can refer, but are not limited, to the following areas of research:

- Micro-foundations of organizational networks: How individual characteristics and cognitions affect the emergence of network structures and how these network structures affect individuals.
- Dynamics of organizational networks: How network structures at various levels co-evolve and affect one another, as well as organizational processes and outcomes.
- Time-dependence in organizational networks: How organizational networks at various levels change at different paces over time.
- Overlap and interplay between social and other kinds of networks within and across organizational settings: How organizational networks are affected by the affiliation of individuals, or organizations to events or contexts.
- Organizational networks and the future of work: How new technologies (e.g., digital platforms, Artificial Intelligence, Virtual Reality) and new forms of organizing (e.g., distributed, boundaryless, and hybrid organizations) shape, support or hinder organizational networks.

We welcome both theoretical and empirical contributions addressing various aspects and implications of organizational networks research.

Paul Expert, Paola Zappa

A digital perspective on healthcare ecosystems

The healthcare ecosystem has undergone a profound and rapid transformation over the past few years, prompted by the wide adoption of digital technologies. They have reshaped the interactions between healthcare workers, patients and institutions, unveiling both opportunities for global collaborations on complex processes and projects, as well as potential solutions to local issues to improve inter-institutional access to patient data, services and empower patients. For instance, the emergence of informal communication means, e.g. apps and virtual platforms, has changed the way healthcare workers communicate and how patients can interact with the healthcare system, and has thus improved information sharing between all actors, enhanced feedback mechanisms and monitoring processes, streamlined training programs and fostered new ways of collaborating in clinical and research initiatives. In parallel, the use of electronic healthcare records has promoted coordinated care and synchronization of patient-centered interventions. Finally, the introduction of AI solutions has reshaped the machine-human division of labor and interactions as well as interpersonal coordination by expanding the machine assisted decision-making and problem-solving solutions.

This transformation can be felt and used at different levels, from local specialist clinical teams for information handover between shifts, to within hospital multi-specialist teams such as in Intensive Care Unit, intra and inter-hospital patient transfers, and telemedicine platforms connecting healthcare professionals across continents, such as virtual robotic surgery teams. Despite the rapid proliferation of these technologies, tools and practices, their functional and organizational aspects, ethical implications and impact on patient outcomes and healthcare systems in general remain to be systematically assessed.

We welcome theoretical and empirical studies that contribute to the debate on all aspects of the digitalization of the healthcare ecosystem, as well as methodological papers offering insights on the treatment of digital healthcare data.

Keywords: Healthcare ecosystems, digitalization, intra/inter-organizational processes

Maria Ines Leyton

Digital Activism and Social Justice: Network Structures in Contemporary Movements

As digital platforms have become crucial spaces for activism, social networks now play an essential role in mobilizing and shaping movements for social justice. This organized session explores how networked structures support and influence a range of social movements, including but not limited to feminist, environmental, political and human rights activism. We aim to delve into how digital platforms facilitate solidarity, amplify marginalized voices, and catalyze change, as well as the challenges they pose, such as polarization and misinformation. Presentations in this session will analyze networked activism across different types of actors (e.g., individuals, influencers, advocacy groups, NGOs) and the relational dynamics of digital activism, including cooperation, solidarity, and opposition. We invite contributions that employ Social Network Analysis (SNA) to uncover mechanisms of influence and organization within these movements, focusing on the interaction patterns that drive collective action, the diffusion of social justice narratives, and the formation of resilient support networks.

This session welcomes empirical and theoretical approaches, featuring diverse methodological traditions—quantitative, qualitative, and mixed-methods—that provide insights into the potential and limitations of digital networks in advancing social justice causes. Participants will gain a deeper understanding of how network structures in digital spaces influence advocacy, mobilization, and policy change.

Guillaume Favre, José Luis Molina

Global Perspectives on Personal Networks: Data Sources, Case Studies, and Cross-Cultural Comparisons

Over the past few decades, an increasing number of surveys on personal networks have been conducted. However, with a few exceptions, these studies are often limited to national contexts or specialized samples. In this session, we aim to bring together presentations that focus on international or cross-cultural comparisons of personal networks, leveraging the cumulative nature of these studies to uncover large-scale patterns and insights. Contributions may explore data collection methods (Qualitative approaches, Surveys, Social Media data), theoretical frameworks that may account for the nature of personal network data, or comparative studies, among others.

Heather McGregor

Social Capital themed session

Social capital, a vital concept in the study of social networks, embodies the value that arises from social relationships, mutual trust, and cooperative structures. As an interdisciplinary topic spanning sociology, economics, and political science, social capital highlights how network connections contribute to individual and collective well-being. Within the broader context of social networks, social capital underscores the benefits derived from relationships, such as access to information, influence, and support, which enhance the productivity and resilience of communities.

Understanding social capital is crucial as it shapes how individuals and groups mobilize resources, fostering collaboration and innovation. In strong, interconnected networks, trust and reciprocity enable more efficient knowledge sharing, reduce transaction costs, and facilitate problem-solving. These advantages are evident in diverse fields, from business, where social capital can lead to better job opportunities and strategic partnerships, to public health, where it strengthens community responses to crises.

Moreover, social capital can amplify social cohesion, promoting inclusive societies where shared norms and values are reinforced. However, it is not without challenges, as unequal distribution of social capital can exacerbate societal divides. Therefore, studying social capital within social networks helps reveal both the potential and the complexities of leveraging human connections to build more robust, equitable, and collaborative social structures.

Christina Prell, Petr Ocelik, Paul Wagner, Marc Esteve Del Valle

Networks & Sustainability

In this session, we wish to showcase papers that combine network approaches with a focus on sustainability. We define ‘sustainability’ as a multidimensional concept that considers how humans and natural systems can co-exist, within planetary limits, for both the present and future generations. In a general sense, sustainability translates into developing and perpetuating human/social practices that are in alignment with the preservation of ecosystems. Increasingly, however, sustainability also encompasses an awareness of the 17 Sustainable Development Goals (SDGs), adopted by the UN in 2015. Here, scholars adopt network tools to either focus on individual SDGs (e.g. SDG13 Climate Action, SDG15 Life on Land, etc.) or assess the trade-offs and synergies of SDGs.

We thus welcome receiving paper abstracts that encompass any of the above (and potentially other) definitions of sustainability, with specific attention, however, on how a network approach contributes to our understanding of this increasingly important concept. Different scales (local, national, and/or global), networks (human and/or non-human), and disciplinary perspectives are all welcome.

Claudia Zucca, Lorien Jasny, Mario Diani, John McLevey

Network Approaches to Attitudes and Beliefs

The study of how different beliefs are related to one another has a long history, dating back to Philip Converse's comparison of the beliefs held by the public and elite on international relations. The 'relational culture' perspective argues that understanding the relationships between attitudes, beliefs, and values is crucial to understanding society as a whole, as they provide meaning and order. By treating these relationships as a network structure, researchers can explore new questions and theories regarding cultural formation and change within the social networks of society. This approach is used across a variety of disciplines, including anthropology, political science, psychology, and sociology, and employs classic comparative methods such as directed acyclic graphs and Bayesian Belief Networks, as well as complex systems methodologies such as causal loop diagrams, semantic networks, and system mapping. However, this work is often isolated within individual disciplines and uses different terminology to describe similar approaches.

This organized session invites innovative papers that examine networks of connections between beliefs using a variety of methodological approaches and from a broad range of disciplines. Specifically, we are interested in papers that focus on networks where beliefs, ideas, or concepts form the nodes of the network. Both methodologically focused works and novel substantive applications will be considered as long as they explicitly focus on the relationships between beliefs. This organized session aims to bring together the various approaches to understanding belief, such as mental models, fuzzy cognitive maps, cognitive-affective mapping, and belief networks, by highlighting their shared reliance on a network to represent data.

Guy Harling, Dorottya Hoor

Social support and health

A key aspect of social networks as they relate to health is the support and advice that flows through the network. This support is connected to, but distinct from, network position/structure itself. We invite abstracts that consider any aspect of social support and health on networks, focusing on what flows through ties as causal mechanisms for network or health status change in individuals. This might include how health-related support is generated within networks, or how it is patterned across networks (e.g. by age, gender, social status). It might also include longitudinal analysis of how support or advice predicts health knowledge, behaviour or outcome, or how health predicts receipt of support.

In previous years, health topics have included substance use, sexual health, mental health and non-communicable health conditions – but other areas of research are welcome. While the sessions have primarily focused on quantitative analysis, qualitative and mixed-method approaches are welcome. We particularly welcome research from low- and middle-income settings.

Justin R. Knox, Cho-Hee Shrader, Kayo Fujimoto, John A. Schneider, Mariano Kanamori, Martha Tillson, Dustin Duncan

Social networks and health among multiply marginalized populations

Multiply marginalized populations, such as racial/ethnic minority individuals, sexual/gender minority individuals (SGM), and individuals with criminal legal involvement, have been shown to have increased vulnerability to a range of adverse health outcomes. Social networks play a key role in shaping the health of multiply marginalized populations. In this symposium, we explore the distribution of health outcomes among social networks of various multiply marginalized populations, and we identify determinants of potential homophily and how social networks can be leveraged to disseminate health behaviors. Collectively, this symposium demonstrates the relevance of social networks and social network interventions to a range of

health behaviors and outcomes among multiply marginalized populations in order to better understand determinants of health inequities and potential strategies to mitigate these inequities. Dustin Duncan, ScD, will moderate this symposium.

Justin Knox, PhD, will explore the distribution of methamphetamine use among social networks of Black SGM and evaluate associations between social isolation and network-level determinants and methamphetamine use in a presentation titled, "Methamphetamine use and its determinants among social networks of Black SGM."

Cho-Hee Shrader, PhD, will characterize the distribution of HIV status neutral outcomes among social networks of Black SGM in a presentation titled, "Peer influence of HIV status neutral outcomes among Black SGM: A linear network autocorrelation analysis of respondent-driven sampling chains."

Kayo Fujimoto, PhD, in a presentation titled, "Informing DoxyPEP uptake interventions in the context of a heavy burden of active syphilis infection among social networks of Black SGM" will characterize the burden of active syphilis infection among a cohort of Black SGM in Chicago, Illinois and explore the potential impact of types of social network interventions to increase DoxyPEP uptake.

John Schneider, MD, in a presentation titled "Efficacy of a social network diffusion intervention (C3) to increase COVID-19 testing and vaccination among diverse criminal legal involved communities and their network members," will discuss a network diffusion approach to increase context favorable for COVID-19 testing and vaccine uptake, and share preliminary results from their randomized controlled trial.

Mariano Kanamori , PhD, will describe their hybrid 2 implementation-effectiveness randomized controlled trial of an implementation strategy bundle of a social network support component and a one-stop-shop PrEP component to improve PrEP initiation of Latino SGM including those who do not identify as gay and who have lower PrEP awareness than Latino SGM who identify as gay, in a presentation titled, "FINISHING HIV: An EHE model for Latinos Integrating One-Stop-Shop PrEP Services, a Social Network Support Program and a National Pharmacy Chain."

Martha Tillson, PhD, will examine the social support networks of incarcerated women with opioid use disorder from primarily rural areas of Kentucky as they transition from jail to the community, with the aim of evaluating associations between network characteristics and women's drug use post-release (opioid use, methamphetamine use, and injection drug use), in a presentation titled "W-JCOIN: Social network correlates of opioid, methamphetamine, and injection drug use among women following jail release."

Yasaman Sarabi, Matthew Smith

Paper Development Session in Networks and Business Management

This session offers an opportunity for scholars to develop their ongoing research, in the field of Business Management employing network analysis. The session should be of special interest for early career researchers and doctoral students with well-developed manuscripts.

The participants will be initially asked to submit a short abstract to evaluate whether their paper is suitable for the session. At a later date, they will be expected to email a full paper draft to the session organisers. The accepted manuscripts will be shared with other participants, and the attendance to the session will be restricted to the session organisers and participants, to allow for more in-depth discussions, along with feedback from session organisers and peers with similar research interests.

Matthew Smith, Yasaman Sarabi

Globalisation and Network Analysis

Globalisation patterns and economic integration have been a dominant feature of the world economy. However, recent geopolitical tensions and managing climate goals have impacted cross-border relations and the organisation of Global Value Chains (GVCs).

We welcome studies examining global network to understand globalisation patterns in the modern global economy.

Relevant areas include, but are not limited to, the following:

- Multinational enterprise networks
- Firm ownership networks
- Networks of service trade
- Digital trade networks
- International trade and investment networks
- Sectoral economic networks
- Global production networks
- Value Added networks
- Input-Output networks
- Financial networks

Christian Stegbauer, Iris Clemens

Networks and Culture

The role of culture in network research should be more significant. This is because both social forms and meanings are important for forming networks. Networks and cultures are tightly interwoven with each other. It can also be demonstrated empirically how cultures are connected with structures of relationships in networks. Networks are constructed and reconstructed through cultures, and vice versa. As meaning allows relations to emerge and stabilize or prevent them, culture structures social relations in various ways. This leads to differentiations between cultures and networks, for example, different cultures make certain relations more or less likely. In specific structural configurations, an established culture is conveyed and further developed. In this context, the term "culture" is primarily used to refer to the practices, symbols, conventions, and norms that shape everyday life, as well as the collective understanding of what is considered correct or desirable within a given society. Furthermore, the behaviors of individuals can be described as a component of culture. Consequently, when social structures within networks are analyzed, they are inherently linked to cultural content. Incorporating cultural perspectives facilitates a more profound understanding of network analysis, as the underlying motivations for forming and maintaining networks become evident. Therefore, the integration of culture is a crucial element in network research.

We invite all network researchers who incorporate cultural considerations into their analytical frameworks. We are interested in conceptual contributions to the relationship between culture and networks and empirical and other studies of networks that focus on culture.

Demival Vasques Filho, Marcella Tambuscio

Historical Networks

In recent years, historical and archaeological research has increasingly embraced network analysis, driving forward relational approaches to the human past and adapting network methodologies to the specific challenges of humanities data. With graphs now firmly established as tools for modeling complex historical and archaeological data, the Digital Humanities have seen not only advancements in technology but also a growing critical reflection on the theoretical and ethical implications of applying these methodologies.

This session seeks to bring together empirical, methodological, and theoretical research that leverages network analysis to explore historical topics across all time periods and geographies. Presentations are invited that use formal network methods or contribute to the theoretical foundations of network analysis as a means to illuminate the human past.

Suggested topics include but are not limited to:

- Analysis of historical networks, including social, infrastructural, and semantic networks
- Temporal changes in historical networks, examining shifts over time
- Techniques for data collection, retrieval, and modeling from diverse historical sources (texts, artifacts, etc.)
- Addressing the challenges of incomplete, ambiguous, or uncertain data in historical and archaeological contexts
- Network extraction and analysis from historical texts and semantic networks
- Leveraging material culture as proxy evidence for social phenomena
- Investigating transportation, migration, and diffusion patterns
- Economic perspectives within historical network frameworks

Annatina Aerne, Mattia Vacchiano, Maria Prosperina Vitale

The role of networks in education and labor markets

Ever since Mark Granovetter's seminal contribution 'The Strength of Weak Ties,' the importance of social networks in labor markets has been evident. This organized session builds on Granovetter's foundational insight that connections play a critical role in labor markets. Discussions address how networks shape career and study choices, provide employment or hiring opportunities, affect wages, and employer behavior, and lead to occupational closure in labor markets.

Personal networks affect study and career choices and ultimately, also labor market outcomes. Friends, classmates and family members influence educational decisions, e.g. the transition from high school to university. We thus welcome contributions examining how social relations influence educational choices and pathways. Exploring how friendship networks impact study choices potentially also sheds light on mechanisms leading to labor market segregation.

Second, social networks connect workers with potential employers. Personal connections – or social capital - are important for initial job placement, but also for long-term career growth. Understanding how networks shape access to good quality employment and career advancement may also help us better understand income disparities.

Third, this session explores how employers use networks in hiring. Employers rely on referral networks to assess candidates to cope with information asymmetries present in hiring. In addition, employers coping with uncertainty in markets may imitate other employers' strategies. We are interested in contributions addressing the how employers rely on networks for hiring and the implications of network-based hiring, and how employers' behaviour spreads within a market.

Fourth, the session is interested in better understanding occupational closure, investigating how employers and associations cooperate to establishing and maintaining occupational boundaries. Topics may cover the role of professional associations, credentialing practices, and network-driven gatekeeping in shaping access to occupation, and the implications of occupational closure for labor market competition and social mobility.

Finally, the session aims to address the transformative impact of online platforms like LinkedIn, Upwork on labor markets. Moreover, digital forms of working allow collaboration to take place across space and require new forms of connections. Digital platforms and forms of working have revolutionized how workers and employers connect, enabling broader market access, but also bear the risk of increasing inequalities .

Shira Offer

Ambivalence in Relationships and Networks

Ambivalent ties are typically defined as ties that simultaneously evoke positive and negative sentiments. Current research on ambivalence, however, has been relatively limited as network studies tend to use a dichotomous approach that categorizes ties into either “positive” or “negative”, leaving many important questions unanswered, such as what determines the valence of a tie and how this may vary by time and context. If, apart from extreme cases, most social ties are combinations of positive and negative interactions with different net balances of these two elements, then most ties have the potential of being at some point ambivalent. The widespread positive-negative dichotomy obscures the interplay of the emotional, cognitive, and behavioral dimensions of social relationships that may render them ambivalent in complex ways.

The purpose of this session is to put the spotlight on ambivalence in relationships and networks. It welcomes empirical, methodological and/or theoretical papers in various fields (e.g., organizations, family, life course, health and wellbeing) that make contributions to a nuanced understanding of ambivalent ties in networks, including (but no limited) to papers on:

- Conceptualizing ambivalence
- Methodological challenges in studying ambivalent ties
- Dynamics of ambivalent ties over time
- Cultural differences in perceptions and expressions of ambivalence
- Individual and structural determinants of ambivalent ties
- Consequences of ambivalence
- Ambivalence in digital interactions and social media relationships

Robert Panitz, Johannes Glückler

Social Networks, Spatial Context, and Innovation

The intricate relationship between social networks and spatial context has been recognized as a key factor in shaping innovation and regional development. Social and economic systems are not only relational but also inherently spatial, with regional development being affected by the structure and dynamics of networks, which are embedded in specific geographic contexts. The evolution of social networks often reflects and reinforces particular spatial patterns, underscoring the need for a spatially informed understanding of network processes.

This session aims to inspire dialogue between the fields of geography, innovation studies and network research by exploring how spatial factors influence the formation, dynamics, and impacts of social networks. An increasing number of studies in geography, economics and network research have leveraged network analysis to explain spatial phenomena of social relations. This interest opens new avenues for exploring the spatial evolution of networks, the role of regional context in shaping social interactions, and the relational structures that underpin innovation and regional development.

We invite contributions that engage with theoretical, methodological, and empirical aspects of spatially embedded networks, addressing questions such as:

- How does spatial context shape the formation, structure, and evolution of social networks?
- What role do social networks play in regional economic development, and how do they impact innovation diffusion across space?
- In what ways can network analysis techniques be applied to capture the relational dynamics of regions and the spatial patterns of social interactions?
- What challenges arise when measuring the content, flows, and impact of interactions in spatially distributed networks?
- How can we bridge the gap between formal network methodologies and context-sensitive approaches that consider spatial and social complexity?

- What ethical considerations must be addressed when studying spatially embedded social networks, especially in terms of data privacy and power dynamics?

This session encourages interdisciplinary contributions that apply innovative network analysis methods to examine the spatial dimensions of social relations and their impacts on innovation and regional development. By linking relational with spatial analysis, we seek to generate insights into how networks function within and across regions, ultimately contributing to a more comprehensive understanding of how social networks shape and are shaped by geographic contexts.

Göran Kauermann, Anuska Ferligoj, Vladimir Batagelj

Statistical Approaches for Modelling Network Dynamics

With the ubiquitous availability of data on networks, one is increasingly faced with network dynamics. Network structures change over time, actors in the network leave and/or enter the network. Examples are numerous, ranging from trade networks to citation networks and evolving social networks. In recent years, numerous models have been developed to cope with network dynamics, including Stochastic Actor Oriented Models, Exponential Random Graph Models with temporal components, and Relational Event Models, which focus more on continuous-time dynamics. However, dynamic blockmodeling approaches have also been proposed. The research in the field itself is dynamic and the proposed organized session considers this and provides a forum for exchanging ideas on modeling network dynamics and their applications.

The session is organized in collaboration with the Statistical Network Science Committee of the Bernoulli Society. We envisage talks focussing on network dynamics, proposing new ideas, or combining different modeling strategies. The session also provides a forum for applied data-driven work and general statistical as well as conceptual research on network dynamics.

Antoine Hugo Houssard, Sylvain Fontaine, Floriana Gargiulo

Artificial Academia: Exploring the Risks and Hopes for Artificial Intelligence in Science

1 Description:

The rise of connectionist approaches for artificial intelligence (AI) (Cardon et al. 2018), the enhanced performance of deep learning models, and the proliferation of data from online platforms have contributed to a dynamic and rapidly growing AI field, attracting a diverse range of stakeholders (Jacobides et al. 2021). Academic institutions, industry players, and public entities are eager to stake their claim in a field that holds immense potential. The combined efforts of these diverse stakeholders have led to the emergence of a complex technoscientific field in which actors collaborate while trying to pursue their own agenda (Shinn 2002; Jacobides et al. 2021).

In the scientific community, the recent development of AI has yielded contrasted results.

Firstly, academia has gradually lost its central role in AI development, while industrial stakeholders have gained prominence in the field (Ahmed and Wahed 2020; Ahmed, Wahed, and Thompson 2023). Additionally, AI methods continuously raise questions in terms of their adoption by scientific communities (Gargiulo et al. 2023) and their ability to foster innovation (Cockburn et al. 2018; Boden 1998).

Also, AI research is exhibiting and reinforcing concerning trends. For example, a recent report from the United Nations highlighted significant north / south disparities in the advancement of AI research (United Nations 2024). Despite academic effort (Gelles et al. 2024), we also observe significant inequalities between academic and industrial actors, leading to a narrowing of AI research, as observed by Klinger et al. (Klinger et al. 2020). Furthermore, the usage of more generic AI tools poses ethical challenges to academia. These tools, which have already

been widely adopted by the academic community (Akram 2024; Van Noorden and Perkel 2023), are thought to facilitate an increase in scientific misconduct, including data manipulation (Kim et al. 2024).

2 Topics:

The objective of the session is to facilitate a discussion on the recent developments in the relationship between the academic community and AI, here viewed as a methodology, an instrument, and a research field. Contributions can focus on:

- Trends in research topics, methods, and practices in the field of AI
- The advancement of AI methodologies within a particular field
- The epistemic and innovative impact of AI systems in scientific fields
- Research ethics and AI systems
- Interactions between academic, industrial, and governmental stakeholders for the development of AI
- Promises and expectation of academic actors regarding AI

3 Methods:

The session will focus on works mobilizing the following methods:

- Social Network Analysis
- Scientometric Analysis
- Innovation Diffusion Analysis
- Knowledge Representation
- Industry-Academia Interaction Modeling

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Raffaele Vacca, Başak Bilecen, Miranda Jessica Lubbers

Social networks in migration and migrant incorporation: new developments and challenges

This session aims to be a space for presentations and dialogue stemming from two recent initiatives: a special issue on social networks for the scientific journal "International Migration" (2025) and an edited "Handbook of International Migration and Social Networks" (forthcoming with Edward Elgar Publishing). The session invites contributions by authors of the special issue or handbook, their readers, and others interested in the study of migration and migrant incorporation with theories, data, and methods from social network analysis and network science. The goal is to spotlight new developments, discuss challenges, and foster scientific advances and collaboration in the study of migrants' social networks, their antecedents, and their consequences on migration and incorporation outcomes. Topics of interest include, but are not limited to: (1) contexts and environments of migrant networks, network ecology and migration, and the way institutional, cultural, or physical settings shape migrant networks; (2) systematic comparisons of social networks between migrants and non-migrants or between different migrant groups (e.g., as defined by ethnicity, occupation, legal status, etc.); (3) dynamics in migrant networks, social networks in migrants' life course, and network change induced by large-scale crises or shocks; (4) negative ties, difficult relationships, and "negative social capital" in migrant communities; (5) the study of migrant networks with designs and methods from computational social science, including agent-based modeling and analyses of large digital datasets.

Vacca, R., Bilecen, B., & Lubbers, M. J. (In press). Social networks in migration and migrant incorporation: New developments and challenges. *International Migration*. Bilecen, B., & Lubbers, M. J. (Eds.). (Under review). *Handbook of International Migration and Social Networks*. Edward Elgar Publishing.

Maya Ronse, Claudia Patricia Nieto Sanchez, Koen Peeters

Social networks and health in low- and middle-income setting

The study of social networks (SN) applied to health problems in low- and middle-income countries (LMIC) has increased in recent years, yet remains scarce when compared to higher income countries. The objective of this session is to present recent research on these three joint themes and to provide an overview of different health issues and contexts from which social network analysis (SNA) expertise is being built in these regions. In addition to theoretical and methodological reflections on the application of SNA in these contexts, we particularly encourage the submission of applied work that employs a mixed-methods approach. Furthermore, we welcome presentations that address the challenges associated with integrating multiple disciplines in a SNA study, as well as those that explore the use of SNA in the field of infectious, non-communicable diseases, and mental health issues. The focus may be either on the results of health-related research, conceptual considerations and/or the ethical and logistical challenges of implementing this type of research in LMIC.

Myriam Boualami, Dougal Shakespeare

Network and Music: Empirical Approaches

Musical practices are fundamentally networked, from collaborative production processes to interconnected consumption behaviours. Network analysis helps examine these complex dynamics: in music production, creation involves a dense web of individual and institutional actors (e.g., artists, producers, labels, media channels, government agencies), embedded within specific locations and supported by infrastructures like studios, venues, and offices. In music consumption, engagement follows networked logics, from promotion to social recommendations and algorithmic suggestions. Individualised digital consumption traces from streaming platforms and other websites provide insights into collective patterns via advanced network analysis, revealing relationships between listeners, songs, and artists. Additionally, embeddings commonly utilised by personalised recommender systems are built upon intricate networks of item co-occurrences, and potentially introduce biases that can significantly shape listening behaviours.

Mapping the connections between artists, industry players, places, audiences and musical objects using network analysis techniques provides a deeper insight into the social, spatial, economic and algorithmic forces shaping the music landscape. This session takes an interdisciplinary approach, integrating perspectives from geography, sociology, economics, media studies, cultural studies, and computer science. We are interested in a vast array of empirical material, from surveys to web-generated data. We aim to empirically address questions such as:

- * How do networks facilitate innovation and influence the success of artists and songs?
- * How do physical location and mobility affect the network position of actors?
- * What insights can network analysis provide about the global flows and the local dynamics of music?
- * How do musical networks evolve over time?
- * What do musical networks unveil about power and inequality in the music industry?
- * Can network analysis offer a better understanding of music collectivities from digital consumption traces?
- * Can network analysis help us understand the effects of recommender systems and information representation (e.g. embeddings) in music?

By engaging with these themes, this session seeks to push the boundaries of network analysis in music research, presenting new empirical material, methodologies and insights that resonate across multiple disciplines.

Alina Hafner, Iuliia Grebeshok, Peter Gloor

From Elitism to Equity: Reimagining Research in a Borderless Era

The academic research landscape has long been shaped by systemic inequities, favoring scholars from well-resourced universities, English-native speakers, and those with access to prestigious networks. These dynamics have increased elitism in knowledge production and dissemination. This is underlined by previous research such as Ductor et al. (2014), Fronczak et al. (2022); Heiberger and Wieczorek (2016), Mazurek et al. (2022), Morgan et al. (2018) and Schulz et al. (2018).

However, the rise of generative AI (GenAI) tools and the challenges posed by current geopolitical shifts—such as regional conflicts, changing research funding priorities, and shifting international alliances—offer an unprecedented opportunity to rethink and reshape the structures of academic collaboration.

This organized session seeks contributions that explore, through the lens of social network analysis (SNA), the dynamics of equity and elitism in academia. We would like to discuss papers that:

- Map and analyze existing disparities in academic networks and knowledge dissemination
 - Explore how emerging technologies like GenAI can democratize access to resources and amplify underrepresented voices
 - Propose strategies, policies, or systems to bridge gaps and create equitable academic ecosystems
 - Study the impact of geopolitical shifts and economic constraints on research collaboration, including how conflicts or sanctions reshape academic networks or reinforce inequities
- We encourage submissions grounded in sociological theories such as Social Capital Theory, Network Theory, Structural Holes Theory, Cumulative Advantage or World-Systems Theory, as well as interdisciplinary approaches that provide actionable insights. The session invites both empirical studies and theoretical perspectives, fostering interdisciplinary dialogue on creating a more unified and inclusive global research community.

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Nikolitsa Grigoropoulou, Florian König

Social network approaches in the study of socio-economic inequality

This organized session focuses on work that utilizes social network theory and methods to advance our understanding of socio-economic inequality. Traditional approaches to inequality often focus on individual attributes such as income, education, or occupation status. However, social network approaches shift the focus to the relational and structural dimensions of inequality, investigating how patterns of social connections or relationships—such as friendships, family ties, or professional networks—shape the distribution of resources, opportunities, power, and social and economic well-being. This way, network approaches offer fresh insights into how inequality is (re)produced, reinforced, or overcome within and across social groups. Drawing from interdisciplinary research in sociology, economics, public health, and other disciplines, this session will highlight how networks shape access to jobs, education, healthcare, social mobility, or other life outcomes, and how these patterns contribute to systemic disparities in different societies.

We invite contributions that apply network theories, components, and/or methods to study a broad range of themes related to socio-economic inequality, providing a deeper understanding of its causes, consequences, and potential solutions.

Tod Stewart Van Gunten, Guillermo Romero Moreno

Elite Networks

Economic, political and social elites are a longstanding area of research in social network analysis. Corporate board interlocks and ownership networks are a well-established method for studying economic elites. Studies of political elites date back to early work on elite social circles attempting to assess theories of elite integration and pluralism. Social elites are less widely studied, but some studies have succeeded in identifying kinship, civic, friendship and cultural elite networks. Research agendas on these different elites share common threads, including 1) elite permeability, recruitment and selection processes; 2) the extent of integration, cohesion and conflict among elites; 3) the impact of elite networks on career mobility and success; 4) the role of elite networks in shaping collective action, policy-making and political change, among others. This panel encourages submissions that use network analytic approaches to advance research on elites.

Tod Stewart Van Gunten, Guillermo Romero Moreno

Network Approaches to Political Dynamics

Network analytic approaches are useful for understanding political processes and dynamics. For example, political polarization can manifest as shifting patterns of interaction and hence be modelled as an evolving network structure. The spread of political information and misinformation is likewise a dynamic process that can be studied using network approaches to diffusion and contagion. More generally, political debate and deliberation on both online and offline forums can be approached as communication networks (such as patterns of dialogue or attention). These and other applications -- e.g. shifts in support patterns or coalitions with the appearance of newcomers or external factors -- require dynamic models for relational processes, placing them at forefront of methodological advances in network analysis. This panel encourages submissions that use longitudinal network data, dynamic empirical models (such as temporal ERGMs, stochastic actor-oriented models, dynamic actor models, and event-centric models) and/or simulation approaches (such as agent-based models) for modelling political dynamics.

Pavel N. Krivitsky, Michael Schweinberger, Johan Koskinen

Sampled and Missing Network Data

In network analysis, it is common to assume that the data are complete and constitute a census of both actors in the social setting of interest and the relationships of interest among the actors. However, it is also common for the population of interest to be large and not practical to observe or model as a whole, that is, for some actors and relations to be incompletely observed, by design, unintentionally, or because they do not wish to be.

This session concerns advances in methods for analysis of networks with sampled or missing relations and/or nodal attributes, particularly when those relations, nodal attributes and/or their statistics are the target of inference.

Soli Dubash

Network Change, Health, and Wellbeing

Network change is arguably a driving mechanism behind many health changes, from health behaviours to self-rated health or mental wellbeing. Research has found both positive and negative links between health-related outcomes and changes in various network measures. Despite the widespread recognition that network dynamics matter, however, there remains much to be known about their heterogeneous effects on health and wellbeing. This organized session focuses on how and why changes in the structural properties of networks, ego and alter characteristics, and network resources present opportunities and obstacles for people to

cultivate health and cope with illness. We welcome empirical papers using ego-centric or whole network data from any discipline focused on the effects of network change for health and wellbeing, broadly defined, as well as innovative theoretical papers that illustrate testable hypotheses to guide future research in this area.

Nynke Niezink, Christian Steglich, Stepan Zaretckii

Modeling Network Dynamics

While some social networks are static, many social relations change over time. Important insights into how and why social networks change can be obtained with the help of longitudinal observation designs. Such designs can be of a varied nature. Panel data is the structure used traditionally for self-reported networks; regular time series and time-stamped data can be obtained from official or automatic records; but this does not exhaust the types of longitudinal network designs. Corresponding to these differences in data collection, a variety of longitudinal methods of analysis have been developed, such as continuous-time actor-oriented and tie-oriented models for panel and time series data, network autoregressive models for time series at regular intervals, and network event models for data with a fine-grained time resolution.

This session will be open to methodological as well as applied presentations about network dynamics. Presentations can have a mathematical, statistical, theoretical, or empirical subject-matter focus, as long as they are relevant to empirical social science. We welcome applied work that has generated new insights on how networks change, theoretical contributions on what drives network dynamics, advances in data collection for longitudinal network data, and new network dynamics methodology.

Robert Krause, Shihan Li, Isabel Raabe, András Vörös

Social influence

The empirical study of social influence processes has become an increasingly popular topic in social network research in the past years. Advances in data collection and statistical modelling have made it possible to explore and distinguish various influence processes in longitudinal data on networks and individual behaviour. For instance, it is now possible to study which actors are likely to influence which other actors in a network. Further, we may also compare the influence from specific actors and from being in a certain network position, such as influence from and on popular individuals. Social influence is conceptually not even limited to network-and-behaviour studies. We can also investigate mechanisms of network-network influence, where one (one-mode) network defines what the reference group of social actors is that exerts influence, while another (one- or two-mode) network indicates what is being influenced. In this session, we welcome methodological, theoretical, and applied contributions to the study of social influence in networks, as long as they are relevant for empirical research.

Laura Behrmann, Theresa Manderscheid, Benjamin Moles Kalt

Qualitative Network Research: Understanding network dynamics

In addition to the question of how networks function, questions about the conditions of formation, dynamic processes and change of networks pose the greatest theoretical and methodological challenges for network research (cf. Jansen, 1999; Snijders, 2024). As little is known about the emergence and change of networks, qualitative network research promises to provide empirically based contributions to the processes and dynamics of social networks (Uzzi 1997; Hollstein 2023, 2001).

Qualitative social research is based on the social theoretical assumption that social reality is dynamic, perspectival and meaningful in its structure. It is therefore particularly sensitive to social dynamics and processes.

Actors' orientations and strategies are a first source of important insights into network formation and change. However, since network dynamics always involve at least two actors, the analysis of concrete interaction and network practices is key to understanding the dynamic side of network development. Longitudinal data on network processes could also help to understand network dynamics.

We invite projects and papers dealing with network dynamics from a qualitative perspective, including mixed methods designs. Our aim is to discuss the contribution of a qualitative network perspective to the dynamics in and of networks, including methodology and methods. Papers could address the following questions:

- How do networks and their meaning change, e. g. over the course of a person's life?
- Is there evidence of regularities in the change of network structures?
- What role, for example, does digitalisation play in networks and their meaning?
- To what extent can actors specifically influence networks?
- Which methods are particularly suitable for capturing changes and dynamics in networks?

Since all the session leaders speak French, French contributions would also be possible.

Giuseppe Giordano, Giancarlo Ragozini, Maria Prosperina Vitale

Network Analysis for Textual Data in Social Media.

The large amount of textual data available in social media represents a new challenge for data analysts who are searching for new statistical methods, scalable algorithms, and enhanced visualization tools to address the intrinsic complexity of such data structures.

The different steps of any network textual data analysis imply a sequence of demanding tasks, starting from data collection and preparation; defining complex network data structures; implementing algorithms and techniques to deal with different levels of data complexity, and analyzing and visually representing network data.

Scientific debate offers many solutions under Text Mining, Deep Learning, Network Science, etc. We may find pure algorithms, statistical methods, and machine learning techniques related to the specific scientific field. Some methods are for general purposes, others deal with definite applied problems.

This session aims to collect contributions focused on theoretical, methodological, and empirical aspects related to textual network analysis, visualization, and graph embedding.

Claire Bidart, Guillaume Favre, Michel Grossetti, Beatrice Milard, Marlène Sapin, Eric D. Widmer

Personal Networks across the Life Course

Personal network and life course scholarships have become increasingly closer in recent years. A strong interest in personal networks has developed in life course research around the theme of linked lives, stressing the relational dimension of any personal trajectory. Likewise, scholars initially focused on family and peer networks have become increasingly aware of the importance of unfolding relationships through time, along with life events and transitions shaping the structures and dynamics of such networks in various historical and cultural contexts. To promote the further integration of those two lines of research, we propose a session on personal networks from a life course perspective.

Papers on the following issues are welcome:

- The interrelations between life events or transitions and personal networks. On the one hand, such events, either expected or unexpected, often have consequences on personal networks, which may add up in trajectories of cumulated advantages/disadvantages. Conversely, individuals play an active role in shaping their networks to cope with challenging transitions.
- The influence of social norms, expectations, obligations, and values on the composition and the relational dynamics of personal and family networks. Norms of solidarity or reciprocity

might interact in reinforcing crucial resources in some trajectories or, at the opposite, exert additional stresses or demands that hinder individual life chances.

- Methodological developments for the study of personal networks in life course research. Collecting and analyzing personal network data is challenging, given the multiple dimensions of composition and structural features that are possibly affected by changes in the life course. Papers with a longitudinal design are encouraged, although research around specific life events or stages is also welcome. Quantitative and qualitative approaches are equally welcome.

Paul Espinoza, Jessica Matus, Rameena Quddus, Nan Xiao, Anqi Peng, Dawn Delay, Haining Ren, FuZhe Xie

Unveiling the Dynamics of Child and Adolescent Social Networks: Implications for Development and Inclusivity

Understanding the intricate dynamics of friendship networks among children and adolescents is pivotal for fostering positive developmental outcomes. This session brings together five longitudinal studies that employ social network analysis to unravel how various factors—such as academic performance, peer social status, empathy, and targeted interventions—shape the formation and evolution of peer relationships in educational settings.

The first study investigates gender differences in the selection and influence processes within friendship networks related to academic performance among 3rd to 5th graders. By constructing classroom-level networks across 27 classrooms, the researchers examine whether students gravitate towards peers with similar academic achievements and how these relationships subsequently impact their own performance. The exploration of potential gender disparities provides nuanced insights into how boys and girls may differentially experience peer influences in academic contexts.

Expanding on the theme of peer influence, the second study delves into how preadolescents select friends based on social status and how these relationships, in turn, affect their own status over time. Utilizing data from 884 students in 44 classrooms, the study employs longitudinal social network analysis to discern patterns of friendship selection and the bidirectional influence between individual social status and that of their friends. This research highlights the pivotal role of peer relationships in the social stratification observed within school environments.

The third study presents an intervention aimed at promoting inclusivity and diversity within middle school social networks. Recognizing the tendency of adolescents to form homophilous relationships—aligning with peers of similar gender, ethnicity, and language—the intervention strategically pairs students with diverse peers to encourage cross-group interactions. The study assesses how these structured interactions reshape social network structures over time, fostering more inclusive and diverse peer connections.

In the realm of early childhood education, the fourth study offers a comprehensive approach to quantifying children's social capital by creating social profiles that encompass peer dynamics at both the dyadic and classroom levels. Involving 295 pre-kindergarten children across 18 classrooms, the research examines how these social profiles predict socioemotional and academic outcomes. By leveraging observational data transformed into social network metrics, the study provides innovative methodologies for assessing social capital and its implications for early development.

The fifth study explores the role of empathy in friendship formation among fourth-grade students. Including 142 students across five classrooms, this research investigates whether empathy levels influence friendship selection and how peer affiliations impact changes in empathy over time. Utilizing Simulation Investigation for Empirical Network Analysis (SIENA), the study sheds light on the reciprocal relationship between empathy and social network dynamics, offering valuable insights for creating supportive, inclusive classroom environments.

Collectively, these studies underscore the significance of social network analysis in elucidating the complex interplay between individual characteristics and peer relationships in educational settings. They highlight how factors such as academic performance, social status, empathy, and deliberate interventions contribute to the formation and evolution of friendship networks. The findings have profound implications for educators and policymakers aiming to enhance academic outcomes, promote socioemotional well-being, and foster inclusive school communities.

Angela G. Spencer

Network Methods for Implementation Science

Implementation science is a growing field, dedicated to speeding up the adoption of evidence-based health interventions or practices (EBPs) in health systems, organizations, and communities. Social network analysis can be used to plan implementation activities, identify change agents and key stakeholders, and measure adoption or diffusion of knowledge and practices. Presentations that link implementation science theories or frameworks with study designs are encouraged.

Topics may include:

- Use of network methods within Implementation Science frameworks
- Network influences on EBP adoption
- Diffusion of EBPs within networks
- Network characteristics of program recipients
- Changes in networks resulting from EBP implementation activities

George G Vega Yon, David Schoch, Zachary Neal, Frank Takes

Tools and Data for Social Network Analysis

The advancement of computing, software tools, and data has been an important driver of progress in the Social Network Analysis field. Professional software development has gained popularity among scientists and has served as a way to improve the quality of tooling in the field. These tools have enabled researchers to model and analyze complex social structures more accurately, uncover hidden patterns in large datasets, and visualize network data intuitively. They also facilitate replication studies and, in general, empower researchers to tackle larger datasets and more sophisticated questions, advancing both theoretical and applied research in SNA.

This session aims to provide a space to present and feature existing and novel SNA-oriented tools, best practices for data sharing (like data repositories), and datasets that may be relevant to the field. The discussion will be oriented towards short demos, sharing development experiences, case study applications, and the introduction of publicly available SNA datasets and other resources.

Fruzsina Albert

Changes of social networks over time

The change of interpersonal networks can be a result of both individual (e.g. ageing, various life events) and societal causes (e.g. regime change, crises like the COVID-19 pandemic). Recent research shows that our relationships with close family members and relatives are less likely to be changed by major life events, while other types of relationships (e.g. neighbours, NGO members) are more likely to be weakened. Weaker, looser ties (friends, co-workers, ties connected only to specific contexts etc.) are more likely to break or become inactive. The weakening or disappearance of some ties is often compensated by the reactivation of new ties or older, dormant ties. Social processes, various crises situations also leave their marks on relationship structures and may impact the supportive potential of the networks or the level of

social integration of a given society. This session invites reports on research focusing on changes of interpersonal networks, regardless of the methodology used.

Thomas William Valente, Aníbal Luciano Olivera, George G Vega

Contagion and Diffusion processes through Social Networks

Collective behaviors often spread through social interactions, whether it be the emergence of social norms, the rise of social movements, or the adoption of technological and health innovations. Social networks act as critical pathways for these "social contagions." Research on diffusion dynamics has demonstrated that the structure of a social network or the threshold profiles of individuals can significantly influence the patterns and speed of such diffusion.

This session invites contributions from researchers focusing on two key areas:

1. Computational Modeling: Scholars developing mathematical models that explore how structural and cognitive factors affect diffusion processes, as well as those employing agent-based simulations to understand behavior change and diffusion dynamics.

2. Empirical Studies: Researchers conducting empirical work that maps social networks and measures the timing of adoption to build diffusion models are encouraged to participate. These studies may examine who within a network is most susceptible to influence, who serves as crucial influencers, and how social or economic factors shape the adoption process.

This session will provide a platform for presenting new datasets or advances in new contagion models. The discussion will be oriented towards new network interventions in areas like public health and cutting-edge research direction. The different computational models that could be presented match very well with the scope of this year's Sunbelt: "Social Networks, Mechanisms, and Algorithms."

Iina Hellsten, Johanne Saint-Charles, Camille Roth, Nikita Basov

Current trends in socio-semantic network analysis

Combining social networks and semantic networks into a comprehensive analysis has attracted increasing attention in the last decade. This socio-semantic network analysis takes into account both the social relations and the content communicated in those relations. Recent examples of socio-semantic network analysis include research into the creation of ideas and the evolution of knowledge in cultural embeddings (Basov), investigation of echo chambers as constituted by both the interactional and the informational relations between social media users (Roth). In addition, the co-evolution of discourses and social relations has gained interest (Saint-Charles), and socio-semantic networks have been considered as a combination of users, those addressed by the users and the topical content in the communications (Hellsten). We propose a session with two time slots (i.e. 8-10 presentations) on the growing field of socio-semantic network analysis at the Sunbelt 2025 conference in Paris.

Radosław Michalski, Radu Tanase, Agata Leszkiewicz, Heike Trautmann, Mike Preuss, Christian Grimme

Social influence - empirical and multidisciplinary perspectives

In consequence, social influence has become an important topic in multiple disciplines, including but not limited to sociology, epidemiology, marketing and management science, computer science, physics, and mathematics. This special session is devoted to field work and is mostly focused on the empirical perspective on social influence. This is why the research presented in this session is expected to be related to the experimental perspective. As a result of that, we anticipate presentations on studying social influence mechanics (by experimentation), evaluating social influence theories in real-life contexts or deriving new knowledge on social influence from experiments or data.

This is why we believe that only by taking advantage of the knowledge generated across all fields is it possible to move forward in understanding how this complex phenomenon works and how we may benefit from understanding it better. Moreover, we'd like to understand better what are the most urgent needs related to studying social influence and how the aforementioned disciplines can jointly work on addressing them.

We welcome submissions from any disciplines that address (but not necessarily limited to):

- how the social influence occurs at individual and at network level (empirical research),
- how to maximize the spread of influence or the diffusion of innovations (heuristics, analytical solutions),
- how to trigger change (psychological and sociological factors, the impact of social media on social influence),
- how to achieve different goals related to social influence, like minimizing the cost of change or slowing down or speeding up this process,
- how social network analysis and mining techniques can be used for better understanding the social influence phenomenon and diffusion processes,
- how does information diffuse across social networks and platforms? How does this affect the extent of social influence?

The aforementioned phenomena are meant to be studied and discussed especially from the perspective of applied social influence analysis.

We aim to organize 1-2 session(s) lasting 2 hours each. The presentations will be grouped around topics, each topic being discussed from multiple disciplines.

Michaela K Bonnett, Meaghan B Kennedy, Jasmine Fernandez

Layering of External Data in Network Analysis

This organized session is focused on works combining network analysis with external data. Data collection is an enduring hurdle in all research, and in the study of relationships in particular. However, we are living in the age of information. A plethora of data is being collected and made available across multitudes of sectors that may be highly relevant to the understanding of a network. Network analysis is the study of relationships, but they are inherently influenced and informed by the context in which they exist. Harnessing this additional external data to understand the nuance and the relevance of the network to its surrounding community provides real-world insights into network importance.

This organized session welcomes studies taking an innovative approach to the layering of external data from alternative sources with social network analysis. The use of non-traditional data sources in the network analysis may be focused on adding additional connection data, providing further nuance or stratification to node-level behavior, or understanding the context or impact that the network is having outside of the network itself. Studies may utilize any combination of qualitative and quantitative data and, if focused on external impacts, may measure direct or indirect effects that the network has been having on its surroundings.

It requires new approaches and complex data to understand real-world applications of network analysis. Harnessing the vast quantity of data surrounding us to give a more nuanced understanding of how networks function is one important step toward achieving this.

Brian Rubineau

Network Indicators for Group and Team Performance

Can network measures reveal better versus worse groups and teams? If so, what measures, and what are the nature and direction of their associations? In the organizations, groups, and teams literatures, there is substantial interest in identifying indicators for effective collectives. Edmondson's psychological safety, Woolley's team collective intelligence, and Nishii's climate for inclusion are examples of such indicators. These and other scales generally require surveys

or psychometric tests from team or group members. What about network metrics for group and team performance? Network scholars would likely agree that patterns in the collaboration and communication networks of more successful groups and teams likely differ from those of less successful groups and teams, but which metrics and which patterns? This session invites contributions from scholars investigating network indicators for group and team performance.

Jennifer Lawlor, Danielle Varda

Community-Engaged Social Network Analysis

This session welcomes presentations of work that use community-engaged approaches to conducting social network analysis or that innovates on the process of using community engagement in tandem with social network analysis. Pairing community engagement with social network analysis raises unique opportunities and challenges for designing, collecting, and using results. Presenters may cover a range of topics in this area, including:

- > Community engagement across the lifespan of a network analysis (e.g., bounding the network, collecting data, interpreting findings)
- > Incorporating different traditions of community engagement in social network analysis (e.g., CBPR: community-based participatory research and PAR: participatory action research)
- > Overcoming challenges in the process of conducting community-engaged social network analysis
- > Innovative approaches to dissemination and sensemaking of results from community-engaged social network analysis
- > Ethical questions and opportunities in community-engaged social network analysis

Clio Andris, Marion Maisonobe, Zachary Neal, Paul Kilian Schuler, Gil Viry

Spatial and Geographic Social Networks

Social networks are often embedded in geographic space. But examining how network and spatial and geographic contexts intersect yields conceptual and methodological challenges. Accordingly, modeling a network on a map can help researchers better measure distance and travel time between entities, access to amenities and show how different spatial features might influence or correlate with node and tie locations.

This session will be primarily dedicated to the visualization and analysis of geolocated social networks, i.e. those whose nodes have a spatial location. These networks, either egocentric or sociocentric, vary in scale: they could be in a small village, a single building, or across the globe. Network size (number of nodes and edges) can also vary substantially. We invite networks that reflect or are shaped by paradigms of geographic space, such as the influence of local culture, administrative policies, climate, language, access to resources, etc. The primary goal of this session is to share research about concepts, techniques, applications, visualization, and new methods for spatial social networks in a friendly space.

In this session we are interested in:

- Theories, concepts and methods of analysing or visualising spatial social networks
- Influence of space, place and spatial mobility on social network structures and dynamics
- Influence of social dynamics on networks of places
- Role of place and social actors' experience of place in network formation through physical, cultural and geographical dimensions
- Spatial dimensions of personal networks over the life course or in different spatial settings (e.g. urban/ rural)
- Issues of power and social inequality related to the spatial dimensions of social networks

We welcome conceptual and methodological approaches from various research fields and disciplines using quantitative, qualitative or mixed methods for analysing social networks in space.

Jennie Rhodes Law

Community-Based Participatory Research Approaches in Social Network Analysis

This panel will explore the current state of integration of Community-Based Participatory Research (CBPR) approaches within Social Network Analysis (SNA) to foster deeper engagement with participants, validate data and constructs, and mitigate bias. By centering participant voices and experiences, CBPR can improve the data collection process, and support the development of actionable findings for research participants and communities.

Objectives:

Engagement: Discuss strategies for actively involving community members in the research process, from design to dissemination, ensuring their insights shape the research agenda.

Validation: Highlight methods for validating data and constructs through community feedback, enhancing the credibility and applicability of SNA findings.

Bias Reduction: Examine how participatory approaches can identify and address biases in data collection and interpretation, leading to more equitable research outcomes.

Panel Structure:

Introduction (10 mins): Overview of CBPR and its relevance to SNA.

Case Studies (20 mins / each): Presentations from researchers who have successfully implemented CBPR in SNA projects, showcasing diverse contexts and outcomes.

Interactive Discussion (20 mins): Engage the audience in a dialogue about challenges and best practices in applying CBPR within SNA.

Conclusion (10 mins): Summarize key takeaways and propose actionable steps for integrating CBPR into future SNA research.

Target Audience: This panel is designed for researchers, practitioners, and students interested in prioritizing community engagement and equity in social network analysis.

By fostering a collaborative environment, this panel aims to inspire new approaches in SNA that advance academic knowledge but also empower practitioners and communities.

Contact: Jennie Law, jlaw@air.org, 1.845.863.5045

Giuseppe Labianca, Eva Jaspers, Filip Agneessens, Nicholas Harrigan, Samin Aref, Zachary Neal, Andreia Sofia Texeira

Negative Ties and Signed Graphs

This organized session focuses on the co-existence of positive and negative ties in networks across different domains and the need to study positive and negative ties together in order to better understand network dynamics, as well as processes and outcomes within these networks. We encourage a wide range of submissions. Example works include (but are not limited to): Methods and measures pertaining to signed networks (in social, economic, political, biological, financial, informational, or physical contexts); modeling and analysis of negative ties; understanding how structural balance affects volatility in financial markets; explaining the inner workings of political and legal bodies such as legislatures or courts; understanding how threats within a network create needs for allies, particularly in international relations; exploring how difficult ties affect health outcomes; examining where bullying emerges in schools or organizations; exploring how positive and negative emotion are structured within our cognitive semantic networks; how perceptions of negative ties poses unique challenges in organizational research; examining how relational ambivalence affects relational trajectories; and how subgroup fault lines affect intra- and inter-group conflict.

Claudine Salgado

Networks, Governance, and Gender: Bridging Social Structures and Diversity

This section explores the interplay between social network analysis, corporate governance, and gender diversity, focusing on how networks shape governance structures, decision-making, and market outcomes. Social networks in corporate environments, such as board interlocks, have garnered increasing attention in recent research (Wong, 2015; Lamb, 2016). These networks provide firms with essential resources, including expertise, communication channels, and enhanced legitimacy (Hillman, 2003; Ruigrok, 2006). They also foster learning and information-sharing opportunities, helping firms navigate uncertainty in strategic decisions (Pfeffer, 1978; Kilduff and Krackhardt, 2008).

Gender diversity on corporate boards adds further complexity and value to these dynamics. Studies (Ginesti, 2018; O'Hagan, 2017; Sarabi and Smith, 2021; Öberg, 2020) indicate that gender-diverse boards positively influence firm performance and governance quality, addressing challenges like director busyness (Fich, 2006a) and overboarding (Crabtree, 2011). However, issues such as "Golden Skirts," where a limited number of women hold multiple board positions, underscore the uneven distribution of leadership opportunities (Seierstad, 2011; Sarabi and Smith, 2021).

This section invites papers exploring:

- 1 - The application of social network analysis to corporate leadership.
- 2 - The role of board interlocks and gender diversity in shaping governance outcomes.
- 3 - Challenges in collecting and analyzing gender-segregated network data.
- 4 - The influence of social networks on corporate governance practices.

By addressing these themes, this session seeks to advance understanding of the interplay between networks, governance, and gender diversity, offering new insights into their collective impact on corporate leadership.

Filip Agneessens, Jen Badham, Federico Bianchi, Károly Takács

Agent-based modelling and social networks

Bridging micro- and macro-social levels of analysis is pivotal to both social network research and agent-based modelling (ABM), which has recently stimulated fruitful exchanges between the two fields. Recent developments in statistical modelling of longitudinal network data have brought up further discussions on the use of simulations in social network research. ABMs can explain network dynamics and macro-level outcomes through micro-level mechanisms. Unlike in the early days, the network component of an ABM can be calibrated with empirical data, which allows ABM modellers to move beyond the use of abstract networks. Moreover, ABM can be used as a complementary tool to increase generalizability of statistical analysis of network data. This session invites contributions that attempt to explain the emergence or evolution of social networks or dynamic processes over networks, by linking individuals' behaviour to social network dynamics through ABMs in studying e.g., processes of social selection, social influence, diffusion, opinion polarization, social conflicts or cooperation. Particularly — but not exclusively — welcome are contributions bridging theoretical ABM, empirical data, and statistical models of network-generating processes (e.g., ERGM, SAOM).

Xiaoguang Li, Xiaoxian Guo

International Comparison of Social Capital

This organized session aims to explore the diverse manifestations and impacts of social capital across different countries, focusing on how cultural, economic, political, and other factors shape social networks and social capital within societies. By bringing together researchers from various disciplines, this session will present comparative analyses that highlight both the

commonalities and unique characteristics of social capital across nations. Through 4-6 paper presentations, participants will gain a deeper understanding of the mechanisms through which social capital influences societal outcomes and the implications for policy-making in different cultural contexts

Trevion Shamir Henderson, Paris Wicker, Michael Brown, Carolina Banuelos

Structure, agency, and justice in research using social network analysis on Post-Secondary Education

Achieving equity in education remains a global challenge and goal for colleges and universities worldwide. Problems of access and outcomes are often framed either in terms of individual students' decision-making or institutional policy design. While research from the past several decades have documented challenges related to educational disparities that exist due to inequitable treatment based on immigration status, (dis)abilities, gender, race or caste, ethnicity, religion, or sexual orientation, among other factors, social network analysis as both theory and method remains an underutilized tool for studying educational inequities in education outcomes. However, social network theory and analysis can provide insight for researchers working toward social justice and equity by providing insight into the interdependence of agentic action and constraining institutional structure. The purpose of this session is to highlight how social network analysis as theory and methodology can serve as a tool to explore unjust social and societal networks and the implications of such unjust networks in educational settings. As the field of education research continues to see an increase of Social Network Analysis in educational research, how has SNA provided additional context to the persistent inequities that plague higher education? Furthermore, what are the future possibilities for SNA to advance social justice and equity based research, policy, and practice? Session presentations will explore these questions, including empirical, theoretical, and conceptual perspectives, with the opportunity for attendees to engage in thoughtful discussion. We invite scholars thinking expansively about the utility of SNA for studying relationships between various agentic actors within institutions (e.g., students, faculty, administrators), units within institutions (e.g., advising offices, student health services, financial aid and admissions offices), or between institutions themselves (e.g., articulation agreements between 2- and 4-year institutions).

Emmanuel Lazega

SNA, collective mechanisms and social capital of institutions

Social network methods help study social order and conflicts in society by focusing on generic collective mechanisms that help members manage social dilemmas in their collective action. Together these mechanisms form the social capital of communities and institutions. SNA helps measure and model these mechanisms and the relational infrastructures on which they rely: particularistic solidarity and exclusion; socialization and collective learning; social control and conflict resolution; regulation and institutionalization of norms and practices; etc. This session welcomes contributions that provide insights on any collective process modeled using social and/or organizational networks, including analyses of how individuals embarked on such processes manage to navigate them, how these processes concatenate and provide feedback on each other, how similar processes can compare across settings, and how diversification of methods (qualitative and formalized; using online, interview and archival data; multilevel and dynamic) are necessary to explore and understand the social capital of collectives and institutions.

Shan Shi

The Social Networks of Culture and the Cultural Bases of Social Networks

This session explores the intersection of culture and social networks, focusing on how cultural phenomena both shape and are shaped by social networks. We invite research examining the role of culture in network formation and maintenance, the cultural dynamics within networks, and how networks influence the creation and diffusion of cultural products. We welcome contributions from various disciplines, including sociology, business, anthropology, and communication studies. The session will feature both theoretical and empirical research.

We encourage studies across different scales, from large-scale creative industries to more localised networks. Topics may include:

- The influence of social networks on the production and dissemination of cultural products within creative industries, such as film, music, art, and digital media.
- How social networks within communities, organisations, and peer groups facilitate or constrain cultural practices and innovation.
- The impact of cultural norms, values, and practices on the functioning of social networks in diverse contexts.

This session aims to foster interdisciplinary dialogue that enhances our understanding of how social networks and culture co-evolve, shaping individual experiences and broader societal change.

David Benjamin Tindall, Mark C.J. Stoddart, Paul Wagner

Social Networks and Climate Change.

This session will focus on networks and climate change, and will consider papers on theoretical, methodological, and substantive topics related to this theme, including organizational networks, virtual networks, discourse networks, and personal networks. Topics may include (but are not limited to) social movements, values and attitudes, community resilience, policy networks, climate change disinformation networks, political economic networks.

David Benjamin Tindall, Mario Diani

Networks, Collective Action, and Social Movements.

We welcome paper proposals (in the form of a title and abstract) for papers on theoretical, substantive, and methodological aspects of networks, collective action, and social movements, including substantive topics involving personal networks, organizational networks, virtual networks, and discourse networks.

David Benjamin Tindall, Mario Diani

Social Movement Organizations and Policy Networks

Policy networks consist of organizational actors interacting with each other in a variety of ways to support, oppose, implement, or otherwise shape policy options. Depending on the substantive policy domain, different types of actors are typically involved in policy networks include governments, think tanks, business organizations, scientific organizations, and social movement and other civil society organizations. This session welcomes proposals that analyze various aspects of social movement organizations and/or civil society organizations in the context of policy networks, and the policy process.

Gilad Ravid

Networks in Agriculture

The study of social networks has emerged as a robust analytical framework that illuminates the intricate web of relationships shaping agricultural systems. From the seminal studies on

innovation diffusion in farming communities to contemporary research on complex agricultural ecosystems, network analysis offers unique insights into how connections and relationships drive agrarian development.

This session explores the multifaceted applications of social network analysis within agricultural contexts, emphasizing its capacity to bridge diverse disciplinary perspectives. We are particularly interested in research that demonstrates how network approaches can be meaningfully integrated with other methodological frameworks, both qualitative and quantitative, to enhance our understanding of agricultural systems.

The agricultural sector presents a fascinating laboratory for network analysis, encompassing multiple scales and dimensions of connectivity. At the human level, we observe how farmers form knowledge-sharing communities, seek expert advice, and participate in market relationships. At the biological level, network thinking helps us understand complex phenomena such as nutrient flows in crop systems or the spread of plant diseases. At the organizational level, we can map and analyze supply chains, policy networks, and institutional relationships that shape agricultural practices and outcomes.

We invite submissions that showcase innovative applications of network analysis in agriculture, with particular emphasis on works that:

Demonstrate the integration of social network analysis with complementary theoretical frameworks or methodological approaches; Critically examine the strengths and limitations of different network-based analytical techniques; Explore novel applications of network thinking in agricultural contexts; Present comparative analyses of varying network approaches; Address methodological challenges in applying network analysis to agrarian systems.

The scope of relevant topics includes, but extends well beyond:

- Knowledge and innovation networks among farmers and agricultural stakeholders
- Biological and ecological networks in agricultural systems
- Supply chain and market networks for agricultural products
- Land use and crop rotation networks
- Digital agriculture networks and information flows
- Policy and governance networks in agricultural systems

Both qualitative and quantitative contributions are welcome, as are mixed-method approaches.

We encourage submissions that critically reflect methodology while advancing our practical understanding of agricultural systems through network analysis.

This session aims to foster dialogue across disciplinary boundaries and methodological traditions, advancing our collective capacity to understand and improve agricultural systems through network-based approaches.

Gianluca Manzo

Social Networks & Inequality

Empirically-oriented analyses of social inequalities in sociology, economics and demography are dominated by what one may call an “attribute-oriented” view on social inequalities, according to which the analyst typically describes how given context- and/or individual-level features systematically impact on the likelihood that an individual experiences a given social outcome (and how this likelihood is structured across social groups). Multivariate statistics for large survey data is the favored methodological support for this approach.

A complementary view is possible, however. As noted by Christakis and Fowler (2011: 300) in *Connected* (NY: Back Bay Books): “(...) there is an alternative view of understanding stratification and hierarchy that is based on how people are positioned with respect to their connections. Positional inequality occurs not because of who we are but because of who we are connected to. (...) Network inequality creates and reinforces inequality of opportunity”.

Although scattered across several research domains, relation-based approaches to job market opportunities, income inequalities, social mobility, spatial segregation, prestige distribution or scientific productivity can indeed be clearly identified in sociology, economics, and social psychology.

The session seeks to give visibility to this approach by stimulating papers where social networks are the main focus of the approach to understand social inequality. The analysis may concern inequality within the network's nodal and structural properties themselves, the way social network's nodal and structural properties shape the dynamic formation of specific aspects of social stratification, the role that social networks' nodal and structural properties play in shaping social inequality at the macroscopic level or still how network interventions may contribute to social inequality and social inequality's perceptions.

From a methodological point of view, papers based on (a combination of) social network analysis, web-based analytics, computational (agent-based) and mathematical models, and experiments will be especially appreciated. Qualitative approaches are not excluded as long as both the way data are collected and studied, and the process followed to move from the data to the results is clearly spelled out and documented.

Leslie Echols, Sandra Graham

Social Networks in Schools: Promising Intervention Approaches

School-based interventions tend to focus disproportionately on change at the individual level without sufficiently acknowledging that individuals are embedded in peer networks that may shape individual behaviors and influence the extent to which intervention effects are diffused. When used in conjunction with school-based intervention programs, social network analysis (SNA) can be a valuable tool for administering interventions in addition to examining social and behavioral change. For this session, we will invite papers that use SNA to explore the role of the peer ecology in school-based interventions. The papers should focus on interventions that utilize SNA before, during, or after an intervention. For example, SNA might be used to identify intervention participants, measure changes in behavior as a function of network ties (i.e., diffusion effects) , or directly alter the structure of the network itself.

The goal of this session is to highlight the value of SNA for developing and evaluating complex school-based interventions. We are particularly interested in how SNA can inform interventions with populations that are diverse along multiple social identities (e.g., race/ethnicity, gender, sexual orientation, disability status, immigration status, religion). Ideally our two-hour session would include four paper presentations. Authors would have 15 minutes to present their findings and the session chair will facilitate a five-minute Q & A with the audience. The session will conclude with a 30-minute general discussion with the presenters and audience about how to maximize a social network approach to school-based interventions.

Éva Huszti, Beáta Dávid

Contact diary: methodology and practise

Contact diary is an alternative way to explore ego-centric networks where respondents give detailed daily records of all their interpersonal contacts during a given period of time. In the past years sporadic/independent researches in sociology and epidemiology have applied this approach aiming to reconstruct the components of actual and comprehensive personal networks from everyday life.

In this session we invite papers that concentrate on methodological issues as well as studies that actually use contact diaries in practise.

Kathryn M Barker, Jessica Perkins

Alcohol and Substance Use in Social Networks

Social connections, expectations, and norms have long been understood as robust predictors of alcohol and substance use. Less is known, however, about network structures and characteristics that explain variation in population-level patterning of alcohol and substance use and normative perceptions and their change over time. This session aims to bridge disciplines to inspire discussion about the role of social network environments within the broader causal architecture of alcohol and substance use—inclusive of political, physical environmental, psychological, and genetic factors.

We welcome a range of submissions focused on exploring the role of social networks in shaping alcohol and substance use behaviors, inclusive of the mechanisms that are inherently connected to—but distinct from—network position and structure. Submissions may be methodological, theoretical, and/or empirical. We are also interested in submissions from across a diversity of disciplines, cultures, and places. Topics may include, but are not limited to:

- Network patterning of alcohol and substance use patterns and norms
- Alcohol and substance use networks across the lifecourse
- Role of social networks in initiation of alcohol and substance use
- Role of social networks in recovery from alcohol and substance misuse (treatment / support strategies)
- Social network-informed alcohol and substance misuse prevention strategies
- Use of empirical network studies to extend/test causal models of alcohol and substance use
- Networks as mediators/moderators of alcohol and substance use
- Ethical considerations in collection of alcohol and substance use network data

Daria Panebianco, Sara Nanetti, Donatella Bramanti, Andrea Salvini

Networking in the integration of Social Services: What connections for valuable interventions

Strong and reciprocal professional relationships increase the social capital of a service, improving its performance and meeting clients' needs with more effective interventions. Explorations of intra-/ inter-professional collaborations within social services may shed light on structural characteristics and network composition built in the social work practices, in its support, and on opportunities and constraints emerging in the related context, paving the way for a deeper understanding of networking in social services.

This session seeks to explore the transformative role of social networks in enhancing the effectiveness of social services, particularly in care-related practices. Contributions are encouraged by scholars and practitioners presenting theoretical insights or empirical studies on how collaborative interactions among professionals, families and communities can lead to improved care outcomes.

Key themes include the integration of formal and informal networks, the relational benefits of multidisciplinary teams, and the challenges posed by centralization, limited connectivity, and reciprocity within networking structures. Additionally, the session aims to investigate the potential of participatory and community-based approaches to build relational capital and foster sustainable care practices, particularly for children and families navigating complex welfare systems.

This session aims to foster an interdisciplinary dialogue, encouraging innovative perspectives on how inclusive, participatory, and sustainable practices can reshape the landscape of care services. By focusing on the intersections between networks, relational dynamics, and care outcomes, it seeks to advance knowledge and practice in addressing the challenges and opportunities of contemporary social care systems.

Suggested topics

Contributions may be addressed, but are not limited to, the following areas:

- Studies on the effectiveness of multidisciplinary teams in foster care and their impact on children's well-being and relational quality.
- Analyses of connectivity, centralization, reciprocity and social capital within care networks.
- Theoretical reflections on the role of participatory and community-driven initiatives in generating relational capital and supporting families in care systems.
- Empirical evidence on the outcomes of combining formal services with informal support systems.
- Insights into sustainable practices that align with evolving welfare paradigms and respect cultural diversity.

Robin Lemaire, Jorg Raab, Michael Siciliano, Remco Mannak

Cross-sectoral interorganizational networks and complex challenges

Governments across the world are addressing complex challenges, some of which are global and some of which are more local. These complex challenges cross disciplines and include health, the environment, disasters, social equity, accessible higher education, etc... Despite the different contexts behind the challenges, it is often the case that efforts to address those challenges revolve around cross-sectoral interorganizational networks, bringing public and private actors together in finding and implementing solutions. This special session is organized to bridge scholarship across different disciplines but using social network analytical methods to better understand these interorganizational networks. Topics may include (but are not limited to) the structure and processes behind these networks, the dynamics of how they change over time, what makes them effective, how to sustain their effectiveness over time, and how they can potentially be leveraged to help address complex challenges. Session presentations will explore these topics, including empirical, theoretical, and conceptual perspectives, with the opportunity for attendees to engage in thoughtful discussion.

Bernie Hogan, Kate Banner, Michelle Birkett, Patrick Janulis, Joshua Melville, Gregory Phillips II

Visual Network Methods

Following the success of last year's session on visual network methods, we again are inviting interested colleagues to submit to a similar session this year. To give context, much like how we distort a geographic map of the world necessarily when we turn it into a rectangle, we also distort the internally understood set of relationships between people when we draw it as a network. Yet, we still represent these to persons (in all kinds of ways) because they work as sense-making devices. Repeatedly we hear of researchers remarking on how a sociogram or a tree or just a free set of nodes on a page can all unlock meaningful data and help us understand the social world better.

This session is not designed for all network visualizations, per se. Some visualizations are meant to represent a set of data to some imagined audience (like visualizing all collaborations in science or all accounts tweeting about COVID). We are specifically interested in representations that are then shown to someone who considers the network meaningful. This might be a participant-aided sociogram, a web app for rendering one's network, or even a free associating collage of family photos. The important aspect is that we are helping to understand how people represent their world cognitively, how we can enact this better in our methodological practice, and how we can learn not just from the data, but from how people reflect on data that represents them as data subjects.

Within this context we are open with respect to substantive topic choice and approach, but some example topics in this domain might include:

Empirical tests of different visualization approaches in domain specific contexts (such as within public health surveillance studies)

Advances in cognitive research that helps understand why sociograms work

Customized applications that are in development for visually collecting social network data

Community studies that have shown part or whole network diagrams as a part of research

Reports on data quality with respect to visual methods (either within study or comparatively)

Theoretical work bridging social networks, HCI, visualization and visual culture studies.

Yasmine Hourii

Social network factors for the elaboration and diffusion of inappropriate information

As of today, the study of mis-/dis-/mal-information across disciplines has failed to converge to the identification of a prominent factor of individual and/or collective vulnerability to inappropriate information. While psychological experiments reveal a positive association between a lack of critical thinking and inaccurate news absorption (Pennycook and Rand, 2019), observational studies in political science put forward partisan polarization as a prime factor (Osmundsen et al, 2021). Studying mis-/dis-/mal-information as a socially motivated phenomenon is a promising pathway to reconcile these diverging strands of literature. This session will explore the social processes—such as collective identity, inequalities of status or authority, and hierarchy of shared norms—that shape the creation and spread of inappropriate information on networks. Participants will examine how actors collectively assess the quality of a message or information as appropriate or inappropriate and determine whether to relay or share it, as well as with whom.

Holly Baker (Shakya)

The intersection of social norms and social networks

While we have interesting evidence from many different contexts that social networks are an important component of behavior and behavior change, the mechanisms of these dynamics are often missing from network research. In the meantime, public health researchers, international development agencies, and policy makers are increasingly focused on the role of social norms in behavior change, realizing that it is often ineffective to intervene on an individual without taking into account the social normative environment of that individual. Because of this many behavioral change interventions around the world are now being implemented with a social norms lens. Social norms, of course, do not exist in a vacuum, and social network analysis can be a powerful tool for understanding the social scaffolding on which norms are supported. This session will focus on the intersection of social norms and social network analysis. Submissions should consider social network factors in conjunction with social normative factors around a specific behavior or outcome. Submissions are welcome from any academic discipline.

Annette Clair Kendall

Crafting Connections: How the Social Networks of US Artisanal Cheese Pioneers Built an Industry

This session explores how industry pioneers in nascent industries structure social networks to access critical process-related resources, enabling them to innovate and establish new market categories. Drawing on case studies from the U.S. artisanal cheese industry, this presentation examines how industry pioneers create geographically diverse and strategically positioned networks. The session highlights the evolving role of network structures—from fostering human capital in early industry stages to local collaboration in later phases—and discusses the implications for rural entrepreneurship and economic development. Attendees will learn how

these insights can inform strategies for fostering entrepreneurial-supportive social capital in other nascent industries.

This presentation is ideal for scholars and practitioners interested in entrepreneurial networks and the dynamics of social capital in fostering innovation.

Annette Clair Kendall

Leveraging Social Network Analysis to Enhance Food Access in Rural Communities

This session explores the application of social network analysis (SNA) in addressing food access challenges within rural communities. Dr. Annette Kendall will present preliminary findings from the Building Food Access in Rural Missouri initiative, a 3-year federally funded project aimed at building resilient and equitable food systems across Missouri. The discussion will focus on how SNA is being utilized to map and analyze relationships among local food producers, distributors, consumers, and support organizations. By identifying key stakeholders and understanding the dynamics of these networks, the project aims to develop strategies to improve food distribution, foster collaboration, and enhance community engagement. Attendees will gain insights into practical applications of SNA in community development and learn methodologies for integrating network analysis into similar initiatives.

Farah Arosemena-Murfee, Ashley McLeod-Morin, Jenny Lawlor, Danielle Varda

Scientific collaboration networks: Strategies to address agriculture, forestry and fishing occupational safety and health needs

This session will focus on global scientific collaboration networks working to effect change in occupational safety and health within agriculture, forestry, and fishing (AgFF) communities. Community-academic partnerships harness collaboration to build research and outreach capacity, however little is published on their effectiveness in creating lasting change. Network science provides a robust toolkit for impact evaluation. This session will highlight projects using innovative social network strategies to improve AgFF quality of life and well-being. This organized session is targeted for basic and applied research in social network analysis and impact evaluation. The session invites papers that examine transdisciplinary collaborations for studies in AgFF worker health, specifically addressing methodological approaches and best practices to make networks visible and characterize their potential to stimulate occupational safety and health disparities research, translation and dissemination.

The session is organized as a set of paper presentations in terms of the number of twenty-minute slots.

David Chavalarias, Divina Frau-Meigs, Floriana GARGIULO, Laura Hernandez

Beyond detection: disinformation and the amplification of toxic content in the age of social media

The increasing rise of disinformation and the amplification of toxic content (hate speech, polarization, harassment...) on social media initially created a momentum for fighting such information disorders, with fact-checkers and debunkers in the frontline. Increasingly a shift is occurring, intent on re-inventing digital spaces immune to toxic content, with developers of alternative tools and structures (using blockchain, OSINT, etc.). The role of social media has also undergone a lot of scrutiny, renewing the interest in social media analysis beyond Social Network Analysis (SNA), to include innovative methodologies to trace and monitor amplification phenomena, including via alternative social media. Such methods and tools point to solutions aimed at fostering sound digital spaces, safe from information disorders and opinion manipulation, intent on avoiding the amplification of toxic contents.

This Issue aims to provide presentations of the latest advances concerning social media analysis in the context of disinformation detection, platform design and mitigation of toxic content amplification. Articles using theoretical perspectives on the properties required for a digital environment to maintain sound information spaces are welcome, as are innovative perspectives suggesting means to dis-amplify toxic content. A special attention will be paid to critical analyses that consider the dysfunctional organisations of early social media platforms and open vistas on the design and implementation of information-sound spaces, their structures and the actors that promote them.

Topics of interest may include, but are not limited to, the following:

- Social media and opinion mining
- Opinion dynamics
- Fake news amplification, detection and fact-checking solutions
- Innovative tools and techniques for detecting online disinformation
- Design of sound information systems and how they are proffered to users
- Embedded algorithmic bias and toxic content
- Shaping/reshaping sound information spaces
- Impacts of recommender systems (including AI systems) on digital spaces and social groups
- alternative social media infrastructure design

This session is part of the joint sessions with the French Conference on Complex Systems 2025

This session is part of one of the joint sessions with the French Conference on Complex Systems

David Chavalarias, Pedro Ramaciotti, Chiara Giaquinta, Laura Hernandez

Opinion dynamics and political activism : from data to models and back

A huge literature on opinion dynamics models exist, from the pure theoretical explanatory models, which address general properties of the formation of social opinion, to data driven ones that are specifically designed to predict or control the behaviour of a particular system. The former, which are formulated in terms of complex dynamical systems, have been successful in showing how models including stylized versions of the most widespread properties of human interactions considered by researchers in social human sciences, may lead to the large scale properties that are observed in many different real systems, like consensus, polarization or fragmentation.

In parallel, the generalization of the usage of social networks, allowed for large scale phenomenological studies of different aspects of opinion dynamics, leading to a wide collection of observations of different case studies which revealed important tendencies in the evolution of the opinion about selected topics like elections, climate change issues, public health debates, etc. They also revealed some general patterns that seem characteristic of the “online public arena”: the existence of information bubbles, the presence of automated or manipulated accounts, the facility of the spreading of fake news, etc. Along this line of works a few recent examples are: the study of opinion evolution on political topics, in particular during electoral periods, the characterisation of structural properties of the interaction networks that result from the different functionalities offered by the platforms (like mentions, retweets, follower-friend in Twitter), with a recent particular interest on the formation of information bubbles and echo chambers -strongly connected clusters of people that communicate only weakly with others.

This session aim to gather scholars with an interdisciplinary approach to opinion dynamics, from the point of view of sociology, complex systems modeling, data mining and cognitive science.

This session is part of the joint sessions with the French Conference on Complex Systems, CCS/France 2025

David Chavalarias, Floriana Gargiulo

Science dynamics : from reconstruction to social processes

Science is a social game and a collective process. Beyond the search for evidence-based knowledge and reproducible results, many factors influence the development of science and scientific communities such as local norms among scholars with regards to what can be considered as a steady results, science policies that determine the necessary records to get a position, the structure of the scientific community and of the interactions among researchers, the collaborative practices.

This sessions aims to offer a cross-sectional approach to understanding this social aspect of science, from a modeling point of view, as well as from the perspective of fieldwork or the analysis of digital traces.

This session is part of one of the joint sessions with the French Conference on Complex Systems CCS/France 2025

Laura Hernandez, David Chavalarias

Revisiting the Agenda Setting Problem

The influence of mass media on social opinion has been a recurring topic of debate, especially during periods of technological innovation that reshape the media landscape—from Gutenberg’s printing press to the current proliferation of social networks.

Interestingly, the concerns raised with the emergence of radio broadcasting echo today’s debates about social media. A New York Times review from May 7, 1899, titled “Future of Wireless Telegraphy,” warned: “All the nations of the earth would be put upon terms of intimacy, and men would be stunned by the tremendous volume of news and information that would ceaselessly pour in upon them.” This sentiment remains strikingly relevant in discussions about the impact of social networks.

It is widely acknowledged that while media may not dictate what people think, they strongly influence what people think about. As B. Cohen observed, “The press may not be successful much of the time in telling people what to think, but it is stunningly successful in telling its readers what to think about.” This idea, known as the Agenda-Setting Problem, has been a central subject of study in political science, communication, social psychology, cognitive science, and media research.

In the era of widespread social media use, understanding how influence operates—who influences whom, and through what mechanisms—has become a major societal challenge. This is not only because social media platforms are economically vulnerable to manipulation by particular interests but also due to the feedback loops that connect them to traditional mainstream media. On the bright side, the enormous data generated by social media offers opportunities for large-scale, quantitative analysis of public opinion and its evolution over time. The question of fairness in media coverage recently arose in France during a parliamentary investigation into television broadcasting license allocations. The investigation relied on extensive studies by social scientists who analyzed hours of programming, particularly from TV channels accused of bias. These studies quantified speech types and their frequencies but faced criticism from channel defenders who argued that sampling limitations made the findings unrepresentative of overall content. A large-scale analysis of broadcast discourse, compared with political discussions on social media, could provide a more objective evaluation of how traditional media address societal topics.

This session aims to foster collaboration between researchers exploring the Agenda-Setting Problem using advanced quantitative techniques—such as dynamic topic modeling, large language models (LLMs), and network theory—and experts in social and political sciences, as well as communication studies.

This session is part of one of the joint sessions with the French Conference on Complex Systems CCS/France 2025

Laura Hernandez, Guillaume Deffuant, David Chavalarias

The Effect of Cognitive Biases in Online Social Networks

The novelty of online social networks lies in their creation of a vast public arena with evolving rules of virtual interaction. These rules emerge from complex dynamics that blend individual motivations with technical possibilities and limitations, potentially reshaping not only our perspectives but also our sense of self.

Algorithms that control content exposure and suggest social connections play a pivotal role in these processes. While often shielded by industrial property rights and only partially disclosed, evidence indicates that they amplify cognitive biases, such as negativity bias and confirmation bias. These biases can trigger collective phenomena like herding, polarization, and echo chambers. Moreover, agent-based models suggest that online media fosters polarization even in the absence of algorithmic selective exposure, as confirmation bias intensifies with more extreme opinions. Other models have revealed previously undetected biases—later confirmed experimentally—that may help explain phenomena such as digital harassment.

Understanding the effects of cognitive biases—including negativity, in-group, and confirmation biases—on social interactions within online networks is therefore crucial. While these biases, particularly in political contexts, have been extensively studied experimentally, their impact on online social interactions has received less attention from both formal modeling and empirical perspectives.

This session aims to address this gap by inviting contributions that tackle these challenges through formal and empirical models or experimental approaches. It is open to scholars from a broad range of disciplines, including computer science, mathematics, physics, cognitive science, and social psychology. A concerted effort will be made to foster meaningful dialogue and collaboration across disciplines.

This session is one of the joint sessions with the French Conference on Complex Systems

Annick Vignes, Floriana Gargiulo, David Chavalarias

The content creators socio-économique model: from networks to market

Through the emblematic figures of influencers, YouTubers, and streamers, an industry of content creation has emerged, generating enormous monetary flows, but its functioning remains largely unexplored for now. Originally conceived as a space for sharing videos, it has evolved into a central driving force in what scholars describe as the platformization of cultural production. This platform operate through two distinct categories of users: viewers, who engage with content by watching, liking, and commenting, and creators, who upload content while also interacting with the platform themselves. These two user groups mutually influence each other, a dynamic that reflects the dynamics of platform economy. Specifically, an increase in users on one side of the platform (e.g., more viewers) drives growth of users (e.g., more creators) on the other side of the platform. This interplay supports the continuous renewal of this specific socio-ecosystem, amplifying the network externalities associated with the platform, and underpinning the platform ability to generate substantial profits. In order for creators to achieve success in this environment, they must invest substantial time and energy into both content creation and into different strategies of promotion to increase their popularity and then the number of their followers, which insure the possibility of increasing their income. While the functioning of these platforms have been extensively studied, the multi-level and dynamic networks driven by the different social interactions have received less attention from both formal modeling and empirical perspectives.

This session aims to address this gap by inviting contributions that tackle these challenges through formal and empirical models or experimental approaches. It is open to scholars from a broad range of disciplines, including computer science, sociology, economics or physics. A concerted effort will be made to foster meaningful dialogue and collaboration across disciplines.

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