

STS Conference Graz

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ID: 1

Keywords: trustworthy AI, AI act, ethical AI, data governance, accountability

'AI in public and private sector organizations: accountability, trustworthiness, transparency'

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As artificial intelligence (AI) systems become increasingly embedded in organizational practices across public and private sectors, questions of accountability, trustworthiness, and transparency have moved from theoretical concern to practical urgency. AI generally and large language models specifically are seen as potentially dangerous as they influence human knowledge production and affect organizational processes and the quality of their outcomes. Jarke et al. (2025) argue that AI systems lead to power and agency shifts among human and non-human actors in what they call “algorithmic regimes” (p. 7). Organizations embed algorithmic systems into their established work practices and enable and restrict how these regimes unfold (Büchner et al., 2024).

This transformation of knowledge production through AI raises fundamental questions of responsibility and accountability (Fecher et al. 2025). The High-Level Expert Group on Artificial Intelligence (AI HLEG) addressed these concerns with an Assessment List for Trustworthy Artificial Intelligence in 2020, following seven key requirements of ethical guidelines: 1. Human Agency and Oversight; 2. Technical Robustness and Safety; 3. Privacy and Data Governance; 4. Transparency; 5. Diversity, Non-discrimination and Fairness; 6. Societal and Environmental Well-being; 7. Accountability. With the publication of the AI Act in July 2024, rules for AI systems and the concept of ‘trustworthy AI’ have been discussed more widely in private and public organisations implementing AI technologies (European Parliament 2024). However, the operationalization of ‘trustworthiness’ remains contested. For instance, Vining et al. (2025) research whether trustworthy AI “build organisational trust and produce strong outcomes for organisational effectiveness” (p.2). They conclude that AI research and design towards trustworthiness must account for organisational context and explore how trust develops among individuals and organisations. Freiman (2023) warned that the concept of ‘trustworthy AI’ risks holding agents accountable and liable who cannot be held responsible, and argued that only by applying an AI ethical lens, the role of social justice and democracy in trust formation can be included.

In our session, we invite papers presenting empirical findings on how accountability, trustworthiness and transparency are being addressed in AI research and embedded in private and public sector organizations. Furthermore, we welcome theoretical contributions that examine how ethical AI frameworks, feminist STS perspectives and deliberations of fairness can contribute to meaningful applications of ‘trustworthy AI’. Both completed research and work-in-progress submissions are encouraged.

ID: 2

Keywords: Fairness, Rankings, Recommendation systems, Discrimination, Inequality

Fairness and Artificial Intelligence

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The dynamic advancements in artificial intelligence (AI) have given rise to scholarly reflections on the wider ethical and social implications of this development. AI technologies are deployed for various forms of match-making, such as recruiting employees, recommending goods and services to consumers, selecting routes to navigate traffic, or planning recreational outings (cycling/hiking).

The proposed session calls for contributions that explore fairness aspects related to AI-technologies from different disciplinary perspectives. Fairness is a concept that has gained particular prominence in computer science, addressing recognized issues such as the under-representation of individuals or social groups, reduced visibility, and even discrimination. Second, fairness refers to the avoidance of various types of bias (e.g., societal bias, cognitive bias, popularity bias, etc.), which can adversely affect the functionality of AI technologies. A range of computational methods have been proposed in recent years to identify and mitigate AI-related fairness problems.

From an STS and social computer science perspective, fairness issues are discussed in terms of discrimination, inequality, exclusion, and social justice. From this perspective, fairness raises questions over the (in-)equality of possibilities to participate in economic, social, cultural, and political life. How are these opportunities distributed, and what is the role of AI in opening up or closing down how different individuals or groups of society may or may not participate? How do different stakeholders perceive and consider fairness in the design, implementation, and evaluation processes of AI-based systems? How do various actors attempt to shape sociotechnical configurations around AI-based recommender systems? What is and should be the role of legal regulations within these processes?

We invite contributions that discuss how fairness issues can be addressed through various disciplines, including social computer science, sociology, law, and philosophy. We especially welcome submissions that tackle fairness problems that cannot be resolved through a single discipline alone, emphasising interdisciplinary perspectives, particularly from a Science and Technology Studies (STS) viewpoint. Additionally, we encourage discussions on how to bridge gaps between disciplinary approaches to fairness.

ID: 3

Keywords: ELSI, co-design, responsible innovation, governance

Co-laborative Technology Development in the Context of Generative AI

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Current socio-technical developments make it clear that technological and social innovations are mutually constitutive and entangled in complex ways (Fisher et al. 2014). To properly understand and do justice to the inherent complexity, contingency, and normativity of these developments, we propose co-laborative approaches to research and practice (Spindler 2025, Bogusz 2020). More than a mere “methodological add-on,” co-laboration is understood as an epistemic practice involving new forms of knowledge production and shared responsibility across disciplines such as computer and data science, ethics, STS and law (Bieler et al. 2020). This complexity of socio-technical developments and the resulting urgency of integrating ethical, legal, and social aspects into innovation processes is particularly evident in the new possibilities of generative artificial intelligence (GenAI) (Bossert & Loh 2025). Indeed, since GenAI is variously imagined as a tool, colleague, or fully-fledged agent, it also challenges frameworks of co-laboration, which have hitherto been conceptualized in terms of interaction between human actors. This presents a valuable opportunity not only for accompanying AI-development processes but also for interrogating co-laboration with and through AI.

This panel explores how co-laborative technology development is changing or should change in the context of current AI developments. Our focus is on co-laboration through using and understanding AI, meaning that researchers from computer and data science, ethics, STS and law co-laborate in the development. The main topics are:

- **(How) Is the (self-)understanding of co-laborative technology development changing with new technological developments like AI?** What shifts in meaning might emerge in the long discussion on the integration of ethical, legal and social aspects in innovation processes by the fact that AI is a new non-human-actor in co-laborative technology development? How can reflexive spaces be created with increasingly fast-changing and increasingly difficult to navigate diverse actants?
- **(How) Is the everyday work of co-laboration changing in transdisciplinary technology development projects?** What specific conditions for participation, negotiation and action orientation are available? How can reflexive spaces be created in highly specialized (software) development? (How) Can AI learn to be reflexive? What roles and what kinds of agency can be attributed to AI models in the co-laboration process? What new ethical, legal, and social aspects are associated with this? What scope for decision-making remains in the project context?
- **(How) Can collaborative technology development use AI applications to support processes for integrating ethical, legal, and social aspects?** (How) Is it possible and sensible to support transdisciplinary negotiation processes through AI-supported tools? Can and should tools for integrated research be made more interactive and accessible through the use of generative AI (e.g. image models)? (How) Can empirical research on the impact of co-laborative research benefit from AI-supported methods from data science?

This session will consist of 3 parts. One invited lighting talk, a 30-minute co-laborative format, in which the participants discuss and elaborate a case example for our topic and 3 10-minute talks (each with 5-minute discussion time), that you can apply for. We are looking for experience reports, conceptual developments, best practices, new questions, and research results on co-laborative research.

ID: 4

Keywords: Data studies, Data friction, Data politics, Data journeys

Data Disruptions

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Data are often envisioned as circulating effortlessly that render social, economic, and ecological processes legible and manageable. While such imaginaries of data's smooth circulation propel notions of seamless connectivity, frictionless exchange, and efficiency that underpin datafied societies, they also obscure the fragility, politics, and material contingencies of digital infrastructures.

However, notions of digital seamlessness are frequently challenged by accounts emphasising frictions in data movements (Edwards, 2010, Bates 2018), platform ecologies (Laamanen & Mikołajewska-Zajac, 2024), or algorithms (Ruckenstein, 2023), highlighting that data rarely flow unhindered. Such data disruptions emerge when generation, transmission, or interpretation fail or when different actors's needs for data exchange can not be met. They occur when systems malfunction or are intentionally reconfigured, when opacity, latency, or breakdown interrupt the fantasy of data's continuous flow.

Interrupting expected flows, data disruptions can be experienced as frustrating, but also as productive: They provide rich moments of encounters, experiences, and testimony of data and their circulation, surfacing what is often disguised and hidden within interfaces. They shed light on embedded politics, reveal the situated labour and power relations that sustain "smooth" data practices and inspire practices of resistance, care, and repair. They make visible the hidden work, dependencies, and inequalities that sustain digital systems, exposing the material, political, and affective dimensions of data infrastructures.

Data disruptions thus offer a productive lens to investigate the politics of circulation, the situated labour of maintenance and repair, and the contested nature of data's performativity. This panel invites conceptual, methodological, empirical, and activist perspectives that challenge notions of data's frictionless flows and instead engage with questions around their contestation and disruption. It seeks to bring into dialog themes such as:

Investigations into the constitutive forces that produce or reveal data disruptions within the interactions between users, systems, policies, and sociotechnical infrastructures.

Sites and empirical examples of data disruption, contestation and (re)negotiation

Theoretical approaches and vocabularies that conceptualize data disruption

Practical examples of skills, uses, and side effects that consider the removal and erection of barriers and constitute data frictions, e.g., through technical reconfigurations, workarounds, refusal or deliberate opacity

Methodological approaches and heuristics focussing on transformative events in which data are recontextualized or resisted, e.g. ethnographic accounts of everyday data disruptions or breaching experiments

ID: 5

Keywords: virtual communities, digitally mediated social interactions, hybrid spaces, digital platforms, augmented reality

The Sociology of Digital Gaming Communities

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The perception of digital gaming as an isolating and socially reclusive activity has undergone significant transformation in recent years. E-sports events have expanded on a global scale, attracting substantial prize funds and increasingly large audiences. The COVID-19 pandemic, in particular, reshaped individuals' engagement with digital social gaming, legitimizing it as a means of maintaining long-distance relationships during periods of social distancing. Moreover, the growing visibility of gaming communities and individual gamers in public discourse—illustrated by media examples such as “The Remarkable Life of Ibelin” or the YouTuber Drachenlord—demonstrates the considerable influence that digital communities exert on the lives of their members.

This session seeks to exchange and discuss current insights into the formation and structure of digital gaming communities, as well as their sociopolitical implications. Particular attention will be devoted to practices of political engagement and the intricate power relations within these communities. By digital gaming communities, we refer to assemblages of players and other game related actants, who form social relationships in and around digital games. With this open session, we invite empirical and theoretical contributions that approach gaming communities from a STS perspective and reflect on how they extend or challenge existing debates on infrastructure, organization, and gamification.

This includes examining the role of game designers, corporate actors and third-party digital platforms in the constitution of these communities, as well as the agency of their individual members in shaping them. Many game developers have recognized that cultivating engaged online communities contributes positively to the market value of their titles. In many cases, it is therefore appropriate to conceptualize digital games as co-productions shaped jointly by participating communities and game developers. However, the strategies through which these communities are established, and the degree of active involvement by developers, vary considerably. Whereas players of early text-based games were constrained to descriptive exchanges of their actions, contemporary games provide high-resolution visual and auditory experiences, and—with the advent of virtual reality technologies - experiment with forms of haptic interaction (Krell et al. 2023). Examining digital gaming communities through an STS lens helps to understand, how cultural and social participation (Sachan et al. 2025), political radicalization (Winkler et al. 2024), gender and class dynamics (Sığın 2025) and governance practices are co-constituted between digital and hybrid spaces. This session further aims to discuss the dependencies of these digital communities on existing infrastructures and the resulting accessibility questions (Mirowski and Harper 2019). Building on this observation, we want to explore the relationship between the virtual environments generated by game engines, the range of digitally mediated social actions they afford, and the communities that arise within them.

Related questions:

- What role do game development companies assume in the creation and maintenance of these communities?
- How do third-party digital platforms such as Twitch or Discord influence their formation and dynamics?
- What mechanisms of inclusion and exclusion operate within (digital) gaming communities?
- Which normative frameworks or cultural values are inscribed in these communities?
- In what ways do corporeality and sensuality contribute to the constitution of digital sociality?

We welcome empirical case studies, comparative analyses, conceptual discussions, and theoretical insights that help to promote an interdisciplinary dialogue about the above issues across diverse geographies, including the Global South and Global North.

Keywords: infrastructure, humans behind AI, AI labour, data workers, sociology of work

Infrastructure of Im/Possibility: Human Labour and Policies Behind the Third “AI” Bubble

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This open workshop invokes the concept of infrastructure as a lens to think through the human labour and institutional arrangements within policy that co-constitute the im/possibilities of “AI” to be developed and deployed. In studying infrastructures, and going beyond the mere physicality of cloud servers and optical fibres underpinning media infrastructures (Parks & Starosielski, 2015), we aim to make visible the global arrangements of labour and policy that propel the Third “AI” Bubble. We are particularly interested in the types of labour that emerge from a need to comply with ethical and legal standards of “AI” systems, or to avoid liabilities or reputational risks AI companies face due to the unavoidable “hallucinations” embedded in the functioning of Large Language Models.

Preliminary findings of fieldwork by the session organisers point to the central role of human labour in facilitating compliance with ethical and legal standards and frameworks. This demystifies the ever-promoted notion of AI’s ability to substitute labour, but also raises questions on the global infrastructural arrangements necessary to sustain and feed deployment of such systems (Casilli, 2025). Issues around “AI” are global relying on geographies steeped in colonial legacies and neo-colonial settings, wherein global north countries benefit from resource extraction and labour exploitation to the detriment of those in the majority world.

These studies also make visible the shift towards a neoliberal managerialism (Cohen, 2021) in which the work of ‘doing regulation’ is transferred from state-actors to private actors in a move towards the privatisation of regulation. This goes hand in hand with the types of work outsourced to global majority countries (Saraswati, 2012) where most labour activities of content moderation and model “fine-tuning” are taking place (Data Workers’ Inquiry, 2025).

We welcome contributions from a range of theoretical and/or empirical approaches, and particularly those that mobilise concepts from sociology of work, STS and socio-legal studies. We invite submissions that highlight first-person accounts of workers involved in either in the implementation of “AI” regulations and compliance or in the deployment of such systems and mitigation of the inevitable limitations and errors embedded in the very functioning of these systems.

Methodologically, the panel aims at working as a workshop, where each contribution fuels a collective discussion towards a common understanding of the limitations of such systems, the importance of their legal and human labour infrastructure, and the ways to imagine alternative ways of technological development and usage, based on the critical reflexivities of the people sustaining its current trend.

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Keywords: Knowledge, Aesthetics, Staging, Media Platforms

Epistemic Staging on Video Platforms: How Aestheticization Shapes Valid Knowledge in Digital Media

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The digital transformation has not only changed who can produce knowledge, but also fundamentally how knowledge is staged as valid. While classical STS research examines knowledge production in laboratories, institutions, and expert networks, a new type of epistemic culture is emerging on video platforms: Here, organized and unorganized creators compete for attention, with algorithmic selection mechanisms and aesthetic forms of staging becoming decisive for what circulates as meaningful, valid knowledge. This session asks: How is content on video platforms staged as valid knowledge? What role do aestheticization and the attention economy play in contrast to traditional epistemic authorities?

We draw on sociological concepts of knowledge that understand knowledge as communicatively objectified, socialized meaning. The media shift from mass media to interactive media changes—according to our thesis—selection criteria from content to form.

In computerized societies, “informed knowledge” emerges, in which it is no longer primarily the propositional content but the type of presentation that determines significance. Video platforms hybridize interpersonal and mass media communication and create specific “Erfolgsmedien” („success media“) such as money, attention, and aesthetics, under which epistemic claims are processed. This transforms which forms of knowledge can be formalized in the media at all: while recipe knowledge, for example, appears easy to communicate in cooking videos, habitualized knowledge remains difficult to access—an asymmetry with epistemic consequences.

For STS, this perspective offers several key connections: it extends classic questions of epistemic authority to digital infrastructures and focuses on the materiality of knowledge practices – from technical equipment to platform algorithms to visual affordances.

It is particularly relevant here that “success media” on video platforms establish new regimes of epistemic validity beyond scientific validation procedures. The inherent logic of these platforms favors communicative forms of attention-grabbing that affect viewers on various levels, whereby primarily aesthetically presented content is received and circulated as meaningful, valid knowledge. It is crucial that not only explicitly didactic content, but every form of video stages connectable knowledge—be it in terms of production techniques, the reach achieved, or the lifestyles and practices conveyed.

The distinction between organized, institutional creators and non-organized actors reveals different logics of legitimation: while the latter operate in economic contexts, the former operate under different rationalities – but both under the conditions of platform-specific algorithms. This leads to an epistemic regime in which the boundary between knowledge and entertainment, between information and performance, is increasingly blurred. The session invites contributions that examine processes of digital knowledge staging at the intersection of media sociology, sociology of knowledge, and STS, combining theoretical reflection with empirical case studies.

ID: 8

Keywords: socio-technical configurations, architecture & design research, psychological safety, apprenticeships & education & workplace, power relations, prevention cultures, tacit norms & infrastructures, mobbing

Entanglements of Harm: Mobbing-prevention as a Socio-Technical and Systemic Challenge Across Disciplines

Stefanie Egger, Christian Lepenik

The Invisible Lab, Austria

Mobbing — whether occurring in schools, workplaces, vocational education, online spaces, or in informal communities is not merely a behavioral or interpersonal issue — but socio-technical in nature: produced through material arrangements, institutional practices, tacit norms, infrastructures, interfaces, and power relations. This panel proposes to connect perspectives from STS, design research, education research, organizational studies, architecture, psychology, and sociology to examine mobbing-prevention as designable through socio-technical arrangements, institutional cultures, and material as well as digital infrastructures. Rather than treating bullying or harassment as individual deviance or interpersonal dysfunction, this panel asks: How can spatial, organizational, technological, and cultural configurations be designed to reduce exclusion, foster dignity, and actively prevent harm?

Design in this sense expands beyond objects toward systems, rituals, interfaces, architectures, and organizational grammars. Mobbing can unfold via spatial arrangements, digital platforms or organisational norms, processes and metrics. Preventing mobbing requires systemic, situated and participatory interventions that are sensitive to the interplay between social practices and material and technical conditions, transcending disciplinary boundaries. To meaningfully prevent mobbing, we include cyberbullying as a socio-technical extension of the same phenomenon. Digital visibility dynamics, moderation mechanisms and platform design play a critical role in shaping interactions and the persistence or escalation of harm and afford new forms of aggression, persistence, visibility, and amplification (Smith et al. 2013). Platform moderation policies, interface cues, algorithmic visibility, anonymity structures, and notification systems shape emotional and relational experiences — often invisibly.

Drawing on STS analyses of digital infrastructures (Plantin et al. 2018; Seaver 2022), we ask: How can the architecture of digital platforms and hybrid online/offline learning and work environments be re-designed to foster accountability, care, and mutual protection?

Contributions challenging dominant narratives and proposing interdisciplinary pathways for intervention and prevention are especially welcome.

Keywords: data, research data, critical data studies, multiple ontologies, new materialism

Data multiple: An inquiry into methodologies and ontologies of data

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After a decade of critical data studies (boyd/Crawford 2012; Kitchin 2014), research on how data is made and processed is as relevant as ever. LLM technologies and their dependence on data are just the latest chapter in this story. STS and their sensibility for practices of translation are well suited to advancing this essential field. With interests leaning towards larger amounts of quantitative data (e.g., 'big data'), scholars keep reminding the field of the value of smaller data sets (Borgmann 2015; Kitchin/Lauriault 2015) and everyday data practices (Kennedy 2018; Hepp et al. 2022; Feinberg 2022). The session aims to further advance the latter by broadening understanding on how data exist.

The concept of the 'data multiple' proposes that temporarily stable but mobile data objects (Latour 1990) exist as more than one but less than many (Mol 2002). Therefore, the session invites research on doing data through practice, including ways in which they are used across different situations (Bates et al. 2016) or relate to their locality (Loukissas 2019). The question is how this multiplicity of data can be studied, both conceptually and empirically. The session draws on theories of multiple ontologies (Mol 2002; Latour 2013), as well as new materialist informatics (Barad 2002; Klumbyté/Draudé 2025), but other approaches are welcome as well. The session is open to research on any kind of data, explicitly including research data and its management. The session is particularly interested in small-scale, qualitative, non-digital, non-measuring, sensing, and more-than-human data practices. Accordingly, not only scientific, but also artistic and activist contributions are welcome. The organiser aims to facilitate an online conversation between accepted contributors before the conference, so that the session becomes a continuation rather than a first meeting. Contributors are invited to participate in the format planning.

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Keywords: Research Infrastructure, Interdisciplinary Collaboration, Governance, Complexity, Ethics

Governing Complex Digital Research Infrastructures

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This session will explore the impact of complexity on the governance and day-to-day operation of research infrastructures (RIs) as sociotechnical systems, with a particular focus on digitalisation, sustainability, interdisciplinary, and transnational collaboration.

Scientific collaboration is increasingly dependent on digital platforms, interoperable data systems, shared resources, and distributed teams working across domain-specific, institutional and national boundaries. While these configurations provide opportunities for innovation, they can also lead to frictions between stakeholders with differing priorities, practices, and expectations, as well as to paradoxical tensions or persistent contradictions between interdependent elements that can never be fully resolved, only navigated (Smith & Lewis, 2011).

This is particularly challenging in distributed settings, where agency is shared and decision-making extends across organisational and national boundaries. This raises critical questions: How can governance practices remain adaptive, transparent, legitimate, inclusive, and FAIR (findable, accessible, interoperable, and reusable) in terms of data governance? What strategies enable ethical and effective collaboration amid uncertainty and competing requests? We invite contributions that examine the paradoxes and frictions of governance in complex research environments. Suggested themes include:

- Navigating tensions between efficiency and ethical responsibility
- Strategies and practices for reflexive, resilient governance in multi-actor collaborations
- Managing complexity and uncertainty in centralised/decentralised and on-site/remote settings
- Discussions of governance tensions between technical standards (such as FAIR) and broader social and ethical commitments (such as gender equality, inclusion, transparency and accountability).

To encourage engagement, the session will be interactive and participatory. It will begin with a series of short trigger talks from contributors, covering topics such as theoretical and conceptual insights, critical framings, case studies, and practical experiences. These will be followed by a facilitated dialogue among contributors and participants. The session is designed to stimulate collaborative reflection and exchange between STS researchers and practitioners. Rather than focusing on predefined policy models, the session will focus on the complexities and frictions of collaborative governance, aiming to stimulate a dialogue between STS researchers and practitioners. We particularly welcome contributions, both empirical and conceptual, that engage with cases such as digital health infrastructures, the European Health Data Space (EHDS), or complex international and interdisciplinary research consortia. Rather than prescribing policy solutions, the session will explore how complexity can drive both tension and transformation in the governance of RIs.

Reference: Smith, W. K. and Lewis, M. (2011). Towards a Theory of Paradox: A Dynamic Equilibrium Model of Organizing. *Academy of Management Review*, Vol. 36, No. 2, pp. 381–403

ID: 11

Keywords: AI, workflow, research, science studies, creativity, interactive methods, methodology

Workshop: Research Strategies and Hands-on Practices - AI in the Scientific Work Process

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Artificial intelligence now permeates the everyday research process – from literature research and data analysis to scientific writing. At the same time, European institutions (the EU Commission, research ministries, universities) have issued numerous guidelines on the “responsible” use of AI, but these often remain general and vague and fail to reflect actual research practice.

This is precisely where this workshop comes in: it focuses on the gap between institutional guidelines and practical research strategies. The focus is on how scientists (in STS) actually use AI tools, what strategies they develop, where they encounter dilemmas, and how they overcome them. The workshop understands AI use as a socio-technical practice that is worth exploring reflexively – central to science and technology studies.

Approach: Hands-on workshop in four phases

The workshop combines reflective and practical elements to highlight different levels of experience as well as exploratory and established forms of use. Participants are invited to bring their own examples, experiences, questions or issues.

Phase 1 – Reflection: Gallery Walk

Participants explore typical AI usage scenarios presented as vignettes. They document their own experiences, alternative practices, and areas of tension. This highlights the diversity of approaches and possible applications for AI in research.

Phase 2 – Orientation: Impulse for the Workflow

An idealized workflow is presented that systematizes where AI is used in the research process and which decision points arise. This creates a common orientation without standardizing.

Phase 3 – Exchange of Experiences: Speed Geeking

This phase focuses on the immediate, hands-on exchange of concrete AI tools and practices. Participants share their own experiences in rotating groups: How do they use AI in their everyday research? Which tools do they use? What works, where do problems arise? This component is essential for moving from abstract knowledge to practical know-how and bringing different levels of experience into a productive dialogue. To this end, participants bring specific problems or experiences with different tools and maybe function as experts for these tools.

Phase 3.1 - Test the Ideatype AI-Workflow

Participants have the opportunity to rapidly test the ‘ideatype AI-Workflow’ introduced by the moderators in phase 2.

Phase 3.2 - Adapt workflow for Individual purposes

Participants gather again at their chosen gallery and try to adapt the workflow to their specific needs with a kind of rapid prototyping.

Phase 4 Recap & Documentation

Moderators and Participants reflect on their lessons learned and identify open issues that have not been addressed during the workshop.

Results gained during the workshop will be documented on a miro-board and made accessible for participants for further development of an individual AI-workflow.

Objectives

The workshop aims to enable participants to:

- Reflectively understand the use of AI in research
- Learn about specific strategies that work elsewhere
- Provide each other with guidance beyond general guidelines
- Develop a sense of community awareness for common issues

Keywords: Crimes, harms, control, digitalization, technologies

Digital Criminology - Bridging Technologies, Human Practices and Environments

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Digital criminology has rapidly become an umbrella term capturing the diverse ways in which digitalization reshapes crime, harm, justice, and socio-technical systems of control. Rather than describing a “new era” of crime, digital criminology points to the overlap between digital infrastructures, platforms, data practices, algorithmic systems and offline environments on all criminological fronts, from victimization and violence to policing, courts, and markets. The field is dynamic and expanding, with its conceptual underpinnings formulated in the *De Gruyter Handbook of Digital Criminology* (Kaufmann & Lomell, 2025), which maps the genealogies, affordances, and politics of digitalization as material, socio-technical, and power-laden processes. This session draws from those foundations, inviting contributions that examine how digital technologies both transform and reproduce criminological phenomena, practices, institutions, and imaginaries (Tzanetakis & South, 2023).

Digital criminology does not reduce offences to “cybercrime” nor to exclusively online spaces. Instead, it conceptualizes crime and harm as hybrid, interwoven processes where digital data, devices, infrastructures, and logics (such as categorization, automation, platformization) shape the conditions under which criminal offences occur and are governed. For example, online drug markets—whether on the darknet, clearnet, messengers or mainstream social media platforms—illustrate how illicit economies become socio-technical infrastructures shaped by platform affordances, datafication, visibility regimes, and user practices. These intersections, also reflected in emerging work connecting digital media and drug research (Siuda & Wanke, 2026 [forthcoming]), demonstrate how criminological questions fluidly cross online/offline boundaries and necessitate analytical attention to infrastructures, economies, governance, and cultural meaning-making.

This session invites papers that explore how digitalization shapes crimes, harms and control from conceptual, empirical, methodological, or policy-oriented angles. We welcome theoretical developments, case studies, comparative perspectives, and innovative methodological reflections—especially those bridging science and technology studies (STS) and criminology. Possible topics include, but are not limited to:

Digital platforms and infrastructures: platformization, affordances, recommendation systems, governance of platforms; platform-mediated illicit markets (e.g., digital drug markets, sex work platforms, online extremist networks).

Datafication, archives, and surveillance: data governance, predictive policing, biometric systems, facial recognition, risk assessment algorithms, automated decision-making, digital borders, and the politics of data extraction.

AI, computation, and algorithmic control: machine learning in policing and courts, bias and error in algorithmic systems, explainability and opacity.

Digital harms, economies, and communities: hate, harassment, doxxing, manipulation, online victimization, influencer-driven criminalization narratives, reputational harms, platform economies of crime.

Hybrid criminalities and socio-technical assemblages: darknet markets, encrypted channels, digital traces, socio-material infrastructures of crime and control.

Methodologies for studying digital criminology: digital ethnography, online interviews (including encrypted environments), research with/through digital objects and infrastructures, interdisciplinary methodological challenges.

Intersections of digital criminology with media studies, drug research, cultural studies, political communication, migration studies, or urban studies—especially where digital infrastructures reshape risk, regulation, or public imaginaries.

We particularly encourage contributions exploring hybrid environments and cases where digitalization produces new entanglements of visibility, vulnerability, agency, and power. The session brings together scholars in criminology, STS, digital sociology, media studies, and related fields to advance theoretical discussions and empirical insights into how digitalization reconfigures crime, control, justice, and everyday practices.

ID: 13

Keywords: feminist critique, AI, ethics, epistemology, power structure

Feminist Critique in AI: Searching for the New Grounds

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The last decade witnessed, finally, the rise of social and ethical discussions around AI development with strong and prominent feminist voices. The emergence and failure of controversial initiatives by ethics commissions, committees, and specialists in the AI industry only confirm the complexity of these discussions and the tensions between theory and practice (Bender et al 2021; Morley et al 2021; Metzinger, Coeckelbergh 2020). Although legal regulation of AI in society is gaining momentum, it is not surprising that non-engineering issues are still mainly discussed in lecture halls, publications, and conferences of social researchers. The general discussion of transparency, responsibility, trustworthiness, and other options for 'better' AI are not grasping the ground problems of AI. Feminist approaches in particular address such challenges and are able to mediate between theory and practice, between ethics and technology. In recent years, feminist criticism has come particularly close to revising the social and power structures behind the production of algorithms, as well as criticising the epistemology of AI as a product and service, both retrospectively and prospectively (see, for example, D'Ignazio, Klein 2020; Browne et al. 2023; Blas et al. 2025). The session welcomes researchers and practitioners who use critical theories, methods, and epistemologies across the diversity of feminist approaches to rethink dominant relationships and knowledge in the field of AI. We are especially open to interactive, mixed, experimental, or liminal formats of participation.

Keywords: Menstrual Technologies, Cyborg Bodies, Techno-Corporeal Intimacy, User Practices and Experiences

Bloody Cyborgs: Menstruating Bodies in Technological Entanglement

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Menstrual technologies—such as pads, tampons, cups, and discs—occupy a distinctive place within the broader field of corporeal technologies. Unlike many other products, they are not only applied to bodily surfaces but are also often inserted into intimate bodily spaces, designed to absorb, contain, or otherwise interact with menstrual fluid and vaginal tissue. Their material proximity to the body and their capacity to hold, circulate, or conceal bodily substances blur boundaries between bodies and technologies in particularly striking ways.

This panel explores the cyborgian dimensions of menstruation. Drawing on Donna Haraway's notion of the cyborg as a "hybrid of machine and organism, a creature of social realities as well as a creature of fiction [...] that changes what counts as women's experience in the late twentieth century" (1985, pp. 65–66), we consider menstrual technologies as agents that do far more than enhance productivity. They actively re-/configure bodies, practices, sensations, and sexual and gendered experiences. By foregrounding the intimate entanglements between menstrual technologies and menstruating bodies, the panel investigates how these 'everyday devices' participate in the making of cyborgian subjects. Through inter- and transdisciplinary perspectives, we seek to understand how menstrual technologies re-/configure bodies, structure embodied experiences, and generate new practices and forms of knowledge.

Although STS research increasingly examines how humans and technology intersect, the specific domain of technology and menstruation—despite affecting a large part of the population—continues to receive little attention. With this panel, we aim to foreground precisely these neglected intersections and bring menstruation into sharper analytic focus. We therefore aim to investigate the everyday practices, potentials, and challenges of interconnecting menstruators with technology. While the cyborgization of bodies holds tremendous potential to challenge harmful modernist dichotomies, this techno-corporeal intimacy is simultaneously embedded in the political economy of a multimillion-dollar global menstrual products industry shaped by corporate interests, regulatory regimes, and transnational supply chains. We welcome papers that explore not only the potentials of such cyborgization but also critically investigate the frictions, vulnerabilities, and inequalities that emerge through the production, circulation, and use of menstrual technologies.

We welcome papers from scholars as well as from individuals whose engagements with the topic exceed academic boundaries.

We encourage, but do not limit, submissions to the following topics:

- Embodied experiences with menstrual technologies,
- Emotional and affective dimensions of interacting with menstrual tech,
- Sustaining, repairing, and caring for menstrual tech,
- Failures, breakdowns, and glitches,
- Unruly and improvised practices to make menstrual products work,
- Economies of menstrual tech and lived experiences,
- Historical genealogies of menstrual technologies,
- Activist interventions and grassroots innovations,
- Norm-making and body politics in menstrual technology design,
- Regulatory regimes and standards,
- Artistic engagements and discourses with or about menstrual technologies,
- Speculations on menstrual futures

Keywords: gender equality actors, gender equality structures, structural change, gender equality plans, resistance towards gender equality

Gender equality under pressure: current challenges and potential ways forward

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In recent years, gender equality (GE) has gained greater prominence due to Horizon Europe's requirement for gender equality plans (GEPs) as a condition for the eligibility of R&I institutions (EC 2021). This opened up a window of opportunity in which GE work received a significant boost or, in many cases, was seriously addressed for the first time in R&I institutions.

Even though this push by Horizon Europe only took place a few years ago, the context for equality has changed as a result of economic and political developments in Europe and worldwide dramatically since then. Current developments taking place at various levels, some of them overt, some of them subtle, are putting severe pressure on gender studies, as well as on GE in general, and GE actors and structures in particular. This might also limit the potential effectiveness of GEPs. It can be assumed that these developments will bring with it new demands on GE actors and GE work. These developments include, among others

- Budget restrictions (austerity measures)
- Calls for administrative simplification (e.g. Leopoldina 2025)
- Anti-gender movement (open attacks on gender and queer studies, attacks on equality structures and equality activists)
- Increasing demands on equality policy (diversity or gender diversity instead GE, structural change instead of increasing the proportion of women)

Due to budget restrictions, there is a risk that funding for GE initiatives will be reduced, which would call existing structures and measures into question. While the call for administrative simplification may appear gender-neutral at first glance, it raises questions about the use of gender-inclusive language and the consideration of gender in processes, viewing it as an onerous administrative task. Gender/queer studies are sometimes openly criticised as ideological and denied scientific validity. In other cases, criticism is hidden behind demands for greater consideration of diversity, gender diversity, or other individual diversity dimensions. These challenges create new demands for GE actors and structures. At the same time, they emphasise the limitations of the approaches, methods and indicators that have been commonly used in GE work until now. This raises several questions that the session aims to address through theoretical, empirical and practical contributions.

- Should the perspective of GE work be shifted?
- Do we need to adapt our methodological approaches, or introduce new methods?
- Should we focus on different indicators?
- What are the most appropriate ways to address these challenges for GE actors?

We are inviting researchers in the field of GE in R&I as well as GE practitioners to discuss approaches and experiences how

- new approaches or methods are developed in response to the current challenges,
- new alliances are established in response to current challenges,
- standards already achieved in equality policy can be maintained,
- to detect subtle resistances and cutbacks regarding gender/queer studies as well as GE structures.

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ID: 16

Keywords: sociotechnical imaginaries, funding, research and innovation, AI in funding

Rethinking Research Support through Sociotechnical Imaginaries of Fairness and Innovation

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Across Europe, the landscape of research funding is changing. Policymakers, funders, and scientific communities are experimenting with new formats—from randomized and hybrid selection procedures to challenge prizes, mission-oriented calls, and participatory evaluation schemes. These initiatives respond to critiques of traditional peer review and the perceived crisis of meritocracy, efficiency, and trust in science funding. Therefore, as AI systems increasingly support or automate decisions about grant approvals or project selections, decision-making may become less transparent. Criteria once shaped by human judgment could be replaced by algorithmic models whose logic is difficult to interpret. Integrating AI into funding processes not only changes workflows but also reshapes the interaction between technology, organizations, and society. When algorithms take on central roles, new power structures and dependencies may emerge — for instance, favoring certain types of proposals or topics that reflect biases in training data. The main challenge is to prevent bias and structural inequalities while maintaining awareness of the broader social and institutional context of funding. This raises challenges related to transparency, legitimacy, and human accountability in funding decisions. Yet they also enact new sociotechnical imaginaries of what counts as good research, fair allocation, and responsible innovation.

This panel invites contributions that investigate the future of research funding through the analytical and conceptual tools of Science and Technology Studies (STS).

We ask:

- What imaginaries of excellence, fairness, or societal impact underpin emerging funding models?
- How do instruments such as partial randomization or prize competitions redistribute epistemic authority and reshape scientific identities?
- How might the increasing use of AI in funding agencies transform decision-making processes in areas such as grant approval and project selection?
- What kinds of sociotechnical futures could emerge when algorithms play a central role in evaluating funding applications and monitoring compliance?
- How could the adoption of AI-based tools in funding administration reshape notions of fairness, accountability, and trust in public funding systems?
- In what ways do national and European funding agencies differ in their experimentation with such formats—and what can be learned from cross-country comparisons?
- How does the integration of AI into funding procedures reshape the situated practices, norms, and meanings that constitute funding work?
- How can STS contribute to designing more reflexive, democratic, and resilient funding systems?

We particularly welcome empirical studies of funding organizations (e.g. DFG, SNSF, NWO, UKRI, ERC), comparative policy analyses, and conceptual reflections on the governance of uncertainty and innovation in funding. Various theoretical perspectives on the topic are welcome. The panel seeks to bridge academic research and policy advice by critically examining the politics of fostering the future: how funding practices not only support science but also shape collective visions of desirable futures.

ID: 17

Keywords: Sex and Gender Topics (SGT), Training, Intersectionality, Methodology, Inclusion
Capacity building to engage in inclusive sex and gendered research

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Over the last decade, projects and training programmes have been funded to raise awareness of the importance of sex and gender as research variables and to provide researchers and investigators with training. Integrating the gender dimension into research and innovation is paramount for societal and economic growth, and has thus become a prerequisite for research funding applications, particularly under the Horizon Europe Programme. There is therefore an urgent need to educate and train researchers, proposal evaluators and, in particular, the younger generation on the importance of sex and gender topics (SGT) and their integration into research. This urgent need is further compounded by the requirement for inclusivity in research that considers intersectionality, so that future research and innovation benefits everyone, particularly the most vulnerable.

The aim of the panel is to share reflections on tools, methodologies, case studies, conceptual considerations and training programmes, with the goal of better integrating sex, gender and inclusive perspectives into research content. Training programmes will be given special attention.

All presentations should address one or more of the following challenges:

- helping the research community to understand the importance of sex and gender as research variables and how these variables intersect with others;
- provide guidance on incorporating these variables into research curricula;
- address the requirement for inclusive sex and gender topics and intersectionality dimensions in project proposals.

Presentations related to all fields are welcome, including topics in health and biology, artificial intelligence and computer science, sustainable mobility and engineering, and the humanities and social sciences. The latter field involves integrating sex and gender, which is a lesser-known but real challenge with deep social implications. Case studies involving citizen science and/or participatory methodologies are very welcome.

The panel is open to a variety of presentations, which may include, but are not limited to, the following:

- Conceptual papers on the social basis of knowledge production and the importance of sex, gender and intersectional approaches to produce more objective knowledge.
- Case studies where gender has been successfully integrated into research, in order to disseminate best practice on tools and methods for integrating gender at all stages of the research process.
- Examples of training programmes (for face-to-face and online contexts) aimed at researchers, evaluators or funders.

The expected format for abstracts is that of an academic presentation. However, the panel is open to other formats. If the proposers have a specific format in mind, they are encouraged to propose it.

ID: 18

Keywords: Diversity, Difference, Categorization, Intersectionality, Representation

Diversity as an analytical object: STS Perspectives on the Making of Human Difference

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Diversity has come under scrutiny in recent years, as a policy aspiration and as an analytical object encompassing categories of human difference, including race/ethnicity, sex/gender, age, disability, among others. Against the backdrop of the long-standing tradition in STS challenging the taken-for-grantedness of such categories, this panel explores the idea of diversity not only as an umbrella term for these differences, but also its conceptual and analytical potential. We ask what it means to study “diversity” from an STS perspective, how diversity is defined, categorized, and enacted through infrastructures, technoscientific relations, and knowledge production. Thus, we conceptualize diversity as an analytical object co-constituted with science and technology, and the related epistemic and material relations of power that travel across institutions, devices, practices, and imaginaries.

Accordingly, the panel maps how ideas of diversity reorient technoscientific processes, and how science and technoscientific infrastructures mobilize and/or stabilize particular understandings of diversity.

To bring together different approaches and mobilizations of concepts of diversity within STS, we aim to highlight shared questions, and problematizations, and invite participants to discuss case studies that critically analyze topics such as:

- the processes of technology design, production, use, and application in terms of how ideas of diversity are imagined, operationalized, and incorporated;
- the promises that are put forth within different articulations of diversity in its interplay with science and technology;
- the making and unmaking of the ontological categories of diversity within technoscientific practices.

Keywords: health, temporalities, rhythm, pedagogy of the oppressed, Freire, embodiment, care

Rhythms in/of Health and Care – a pedagogy of the oppressed approach

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The role of time and temporalities in health is the subject of an increasing amount of research in STS, medical sociology, public health, medical anthropology and related disciplines. Definitions of what *time* and *temporality* actually mean can vary widely – ranging from the scheduling of health appointments and waiting times, to subjective experiences of time stress, autonomy over one's own time, the temporal structures of everyday life (including time for care work), the rhythms of health and health care, for instance from a life-course perspective or concrete practices of health care provision or economically driven attempts to accelerate medical and nursing care.

In this session, we want to advance the notion that time in health is not just a way to describe how health is delivered or experienced. Time is, in itself, a social construct with institutional and subjectivising force – temporal practices are often taken for granted but can reveal inequalities, norms, values and hierarchies of urgency between different actors or patient groups. Time in health care can thus function both as a mechanism of oppression (as time as a resource in health is unevenly distributed)– and as a means of emancipation (finding time “for yourself”, making time to care, prolonging life). We ask: Whose time demands yield to whose? Whose needs are deemed more urgent? Whose ill health requires more time? What are the consequences of imposed temporalities for patients or medical personnel?

We invite scholars interested in the structuring qualities of time, temporalities, rhythms, durations, routines or daily planning in connection to health and care – understood both in terms of specific illnesses as well as the broader idea of feeling, functioning well or care work. However, in this session we also want to take the notion of *time as political* a step further and invite all participants and attendees to engage in a reduced version of Paulo Freire's **Forum Theatre** – an element of critical pedagogy that uses bodily expression, empathy and community building as tools for political change. The aim of the session is to create a space where scientific research is not only understood cognitively, but also embodied and affective. The session is structured as follows:

- 3–4 paper presentations
- After each presentation, the facilitators (organisers of this session) will, together with all attendees, explore what gestures, movements or sounds naturally emerge when engaging with the stories, methods and discourses of the presented research papers – adapting specific methods from Augusto Boal's and Paulo Freire's *Theatre of the Oppressed*.
- At the end, the groups will perform a mini-play in which the gestures, movements and sounds are merged into a small performance, which in itself might reveal something about the rhythms of doing health research.

This session is designed to be inclusive and suits all levels of bodily ability. Researchers participating in this session will learn tools to use their body as tools to communicate their research through non-cognitive means.

ID: 20

Keywords: Reflexive Terminology, Conceptual Vocabulary, Sustainability, Normativity and Language, Semantics

Disambiguation Of Guiding Key Terms And Concepts Within The Sustainability Transformation

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Modern societies are organized around powerful terms that guide collective imagination, research, and policy: sustainability, resilience, innovation, transformation, risk. These concepts carry normative weight, promising a better future or a more just society. At the same time, they are treated as analytical objects, subject to definition, measurement, and comparison. This dual role creates tensions that demand critical reflection.

From a Science and Technology (STS) perspective, terms are not neutral descriptors. They are social technologies that help us define observable phenomena, shape practices, organize expectations, and structure what counts as legitimate knowledge; Making them, historically situated, socially negotiated, and performative: they make worlds as much as they describe them. To speak e.g., of “sustainability” or “resilience” already presupposes a certain understanding of what change, adaptation, or progress entail. Theoretical and policy vocabularies thus do more than represent reality; they actively participate in shaping it. Examining these vocabularies requires attention to how meaning is stabilized through use, institutionalized through expertise, and challenged through critique.

This session takes as its starting point the observation that we often work with terms whose meanings are both self-evident and deeply contested. While their flexibility allows researchers to use terms inter- and transdisciplinarily, it risks obscuring potential conflicts and complexities. When used unreflectively, such terms risk becoming placeholders for consensus, in Adorno’s language, the „violence of the identity“. The lack of substance and the risk that they may also conceal contradictions can also devalue them. But when these terms are discussed and reflected upon, it can open up spaces for negotiation, new scientific and social trajectories, and dialogue for transformation.

This session aims to enable such a reflection, especially in times when, despite the urgency of a change of course, its necessity is being questioned.

Thus, we invite scholars to explore how a critical and reflexive engagement with terms used in research can become a site of theoretical and practical renewal.

We invite contributions that:

- Examine the histories and semantic trajectories of key terms in contemporary discourse.
- Reflect on how concepts operate as boundary objects between science, politics, and everyday life.
- Investigate how terms enable, constrain, or depoliticize particular imaginaries of social and ecological futures.
- Discuss methodological approaches for critically engaging with our conceptual vocabulary within STS and beyond.

Rather than seeking new definitive definitions, the session calls for a practice of reflexivity: to understand the words we work with as evolving and contested sites of meaning that both reveal and conceal the conditions of thought. In times when societal transformation is not only a political project but a conceptual one, reflecting on our language becomes a central task of critique.

We invite contributions in the form of presentations, readings, and performances. The session will conclude with a final discussion by the chairs on a selection of controversial topics from the contributions made during the session.

Keywords: advanced bioenergy, sustainability transitions, biotechnology, societal acceptance

In search for the desirable, sustainable and just bioenergy

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Bioenergy remains a controversial solution in sustainability transition research and practice. It is often presented as a renewable alternative to conventional fossil fuels that addresses environmental and socio-political challenges associated with those fuels. Yet its deployment has created disillusionment and raises profound questions about justice, ecological impacts, and socio-technical futures (Ahola-Launonen & Kurki, 2022). This session invites critical perspectives on the contested role of advanced bioenergy in low-carbon transitions (e.g., Levidow & Raman, 2020; Eaton et al., 2017), exploring how “desirable” energy futures intersect with environmental realities, governance structures, market dynamics, and social and ethical concerns.

The urgency of climate action has generated renewed interest in advanced bioenergy as a key component of the bioeconomy (Saarela, 2019). However, large-scale biomass use can exacerbate land-use conflicts, biodiversity loss, and food insecurity, while reinforcing global asymmetries between the Global North and Global South (Birch & Calvert, 2015; Levidow & Paul, 2010). At the same time, advances in genomic science and synthetic biology promise solutions to the undesirable and unjust consequences of less advanced forms of bioenergy/earlier bioenergy pathways (Frow, 2020). Technological innovations in biotechnology add a new layer of complexity to prevailing controversies (Shahare & Thayyil, 2020), introducing new ethical, environmental, and governance challenges even as they promise to make bioenergy more efficient and sustainable.

This session aims to enliven the academic and practitioner debates on what makes bioenergy futures desirable, sustainable, and just. We seek contributions that critically examine and reflect on how these developments shape the role of advanced bioenergy in the sustainable energy transition, addressing but not limited to the following themes:

- Desirability and socio-technical transitions: How is bioenergy framed in policy, industry, science, and civil society discourses? Which visions dominate, and whose futures do they privilege?
- Justice and equity: How genetic modification in bioenergy shapes the questions of justice and equity, including distribution of benefits and burdens, availability and affordability, fairness in participation, recognition of marginalized groups, and concerns of long-term sustainability?
- Governance and power: How do institutions, regulations and policy frameworks shape the role of advanced bioenergy in energy transitions?
- Risk and regulation: How is advanced bioenergy constructed as risk objects and who participates in this construction? What forms of regulation contribute to mitigating the risks?
- Technological and business innovations: How do novel innovations, e.g., genetic modification, or renewable fuels derived from microbes and algae, shape the landscape of bioenergy?
- Diffusion and market-related challenges: What socio-economic, technological, and regulatory challenges shape the widespread adoption and use of advanced biofuels?
- Social acceptance and citizen engagement: How GMOs are perceived, discussed, and contested across different contexts, including issues of participation, consumers' willingness to adopt, acceptance barriers, and other factors influencing diffusion?
- Ethics and responsibility: How do ethical considerations and frameworks inform discussions around genetic modifications, environmental stewardship, and sustainability issues?

Keywords: Energy transition, Sector integration, System innovation, Exnovation, New STS approaches

Emerging socio-technological challenges in advancing sustainable energy transitions

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The energy transition is entering a new phase. While earlier efforts focused primarily on establishing renewable energy as a technically and economically viable alternative, the current phase is characterised by the increasing complexity, speed and scale of the transformation process. This shift has far-reaching technical, social and institutional implications. Over the next decade, key challenges will include managing the interaction of multiple technologies, the decline of established business models and organisational structures, intensified economic and political competition among stakeholders such as utilities and industry associations, and ensuring the stability and performance of the energy sector as a whole.

The vision of a decarbonised and sustainable energy system points to increasing sectoral integration, the emergence of new technologies and business models, and context-specific, locally adapted solutions. For researchers, this evolution requires a critical reassessment of existing analytical frameworks and the adoption of innovative strategies, methods and data sources. Comparative research approaches are likely to become more important, while new societal dynamics may present additional challenges to traditional modes of enquiry.

In this session we will discuss questions regarding both our research practice as well as upcoming social challenges:

- Which knowledge has been created in STS so far and how is this knowledge related to transformations in the energy system?
- What knowledge is missing and what can we learn from previous projects?
- Which new research strategies and methods seem promising given these new realities?
- Which social challenges will arise as a result of the new dynamics in the energy sector?
- How can new social groups be involved in the energy transition and how can we deal with the “Not in my Backyard (NIMBY)”-problem?
- What is the significance of social values, practices and meanings?
- How can we broaden the idea of energy communities and which business models point out new ways?

Keywords: Green hydrogen, sustainable energy transition, global south, decarbonization, governance and policy

Green Hydrogen Energy transitions in the Global South: Pathways, Potentials, and Challenges

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The Paris Agreement has accelerated the global pursuit of sustainable and low-carbon energy systems to limit global warming to 1.5°C. Within this transformative vision, green hydrogen has emerged as a pivotal energy carrier, central to decarbonizing hard-to-abate sectors such as steel, fertilizers, and heavy transport. Yet, green hydrogen transitions are highly material- and resource-dependent, relying on abundant renewable energy, critical minerals, land, and water resources that are unevenly distributed and politically contested across the Global South. Countries such as India, China, Brazil, and South Africa are positioning themselves as future leaders in green hydrogen production and trade. India's National Green Hydrogen Mission and China's Hydrogen Industry Development Plan (2021–2035) both link hydrogen development with industrial modernization, renewable energy integration, and global competitiveness. However, these efforts face profound challenges: technological dependence on advanced economies, financing gaps, resource constraints, and environmental trade-offs. The global investment in hydrogen expected to surpass USD 600 billion by 2030 risks reinforcing North–South inequalities unless accompanied by equitable access to technology, markets, and sustainable infrastructure.

The session seeks contributions that focus on the various aspects of Global South energy transitions, including but not limited to the following objectives:

1. Understanding the resource dependencies of green hydrogen: examining how hydrogen production depends on renewable power, land, and water resources, and the implications for sustainability and local livelihoods.
2. Exploring governance and policy frameworks: analyzing how Global South countries are aligning national hydrogen strategies with their industrial and environmental goals while addressing institutional and infrastructural challenges.
3. Comparing transitions across the Global South: identifying context-specific innovations, governance mechanisms, and cooperation models that enable sustainable hydrogen ecosystems.
4. Making green hydrogen transition inclusive: discussing how green hydrogen can foster, equitable, and resilient energy futures in the Global South.

By bringing together scholars, policymakers, and practitioners, this session aims to critically interrogate the sustainability potentials and governance complexities of green hydrogen transitions. It contributes to global debates on how energy, resources, and development intersect to shape just and context-sensitive pathways toward decarbonization in the Global South.

Keywords: Behavior Change, Science Communication, Sustainability Transitions, Socio-Technical Systems, Incentives

Science as a Compass and a Catalyst: Guiding Behavior Change in an Age of Transformation

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We live in an era of profound and often contradictory global shifts. The urgent need to address ecological crises like climate change runs parallel to geopolitical instability and economic pressures. This complex global landscape consistently highlights a critical need for rapid and large-scale societal behavior change. Navigating these transformations successfully is one of the paramount challenges of our time. While science is adept at identifying problems, its role as a direct driver of behavioral adaptation remains a contested and complex issue. A persistent "value-action gap" demonstrates that conveying factual knowledge alone is often insufficient to alter ingrained individual and collective behaviors (Gifford, 2011).

A prime example is the transition to electric mobility. While natural and engineering sciences provide the technological foundation, the transformation itself is a deeply socio-technical process. Its success hinges on shifting consumer habits, reshaping cultural symbols, and establishing new social norms (Canzler and Knie, 2016). This illustrates that technological solutions require a sophisticated understanding of human behavior. Research confirms that the adoption of sustainable technologies is heavily influenced by a range of psychological and social factors beyond purely economic or technical calculations. These include cognitive biases such as status quo bias, the powerful influence of perceived social norms, and affective responses to new technologies (Sovacool et al., 2020). Therefore, overcoming barriers like "range anxiety" is as much a psychological and communicational challenge as it is a technical one.

This session aims to critically examine the role of science — particularly the social and behavioral sciences — as both a compass for orientation and a catalyst for action. Research in science communication, for instance, shows that public perception of scientific consensus acts as a crucial "gateway" to greater support for policy action (van der Linden et al., 2015).

How can such insights be systematically translated from descriptive findings into effective, ethical, and equitable incentives for change? How can science help policymakers and civil society design transition pathways that are not only technologically viable but also socially accepted and behaviorally sustainable?

We invite contributions that explore the interface between scientific knowledge, policy-making, and public behavior. We are particularly interested in papers addressing the following questions:

- From Data to Doing: What are the most significant psychological and structural barriers preventing the translation of scientific consensus into widespread behavioral change, and what evidence-based strategies from behavioral economics (e.g., nudging, choice architecture) can help bridge the "value-action gap"?
- The Power of Incentives: How can research from behavioral economics, psychology, and sociology inform the design of effective incentive structures (e.g., financial, social, normative) that encourage sustainability and pro-social behavior in complex socio-technical systems?
- Communication and Trust: Beyond conveying facts, what is the role of science communication in building public trust, fostering a collective sense of agency, and navigating the value-laden dimensions of societal transformations?
- Interdisciplinary Approaches: How can social sciences collaborate more effectively with technical and natural sciences to co-create holistic and human-centered solutions to pressing global challenges?

Keywords: sufficiency, sustainable transformation, human and ecological well-being, socio-technical systems, societal governance and design

Sufficiency in Practice: Theories, Discourses, and Experiments for Sustainable Futures

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While the dominant paradigms of sustainability continue to emphasize **efficiency and technological innovation**, a growing body of research underscores the need to foreground **sufficiency**, recognized as the principle of “enoughness”, as a transformative approach to sustainability. Sufficiency challenges productivist and growth-oriented logics by reframing how societies, organizations, and individuals relate to resource use and human and ecological well-being. As reviewed by **Jungell-Michelsson and Heikkurinen (2022)**, sufficiency has evolved from a moral idea into a complex socio-economic and ecological concept, grounded in assumptions of **complementarity of capitals, social metabolism, and altruism**. It calls for rebalancing production and consumption within planetary limits, demanding new forms of equitable governance and social organization across scales and actors.

Despite its growing theoretical sophistication, sufficiency remains difficult to operationalize. Empirical studies reveal behavioral and institutional barriers that hinder sufficiency-oriented action. For instance, **Gaspar et al. (2017)** show that perceived “sufficiency” often functions as a justification for inaction, as households, for example, consider their current energy behaviors adequate, even when they are far from sustainable. This highlights the importance of psychosocial and contextual factors including norms, values, and infrastructures that shape the limits of “doing enough.” At the same time, sufficiency is increasingly being explored in organizational and design contexts, as illustrated by **Bocken et al. (2014)**, who conceptualize sufficiency-driven **business model archetypes** that aim to reduce demand and enable longer product lifetimes. These examples illustrate sufficiency’s relevance across individual, collective, and institutional levels.

This session invites contributions that explore sufficiency as both a **theoretical lens** and a **practical orientation** for sustainability transitions. We encourage papers that engage with sufficiency in its multiple forms - conceptual, behavioral, infrastructural, and organizational, bridging the gap between abstract principles and applied transformation. Contributions may address how sufficiency is theorized within STS and sustainability studies, how it is enacted in both individuals and across communities, businesses, or policy contexts, and how sufficiency discourses shape imaginaries of a good life for all and sustainable futures.

Possible topics include (but are not limited to):

Theoretical and conceptual framings of sufficiency in relation to efficiency, renewables, growth, and justice;

Psychosocial and behavioral dimensions of sufficiency practices;

Empirical studies of sufficiency-oriented projects, living labs, or community initiatives;

Sufficiency-driven business models and organizational transformations;

Policy frameworks and governance strategies for enabling sufficiency;

The role of infrastructures and design in shaping perceptions of “enough”;

Methodological and participatory approaches for studying sufficiency transitions.

The session aims to connect **theory, discourse, and empirical practice**, fostering dialogue between STS scholars, sustainability researchers, and practitioners experimenting with sufficiency-based approaches.

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Keywords: Stakeholder engagement, genomics, AI, One Health

Infrastructures, Genomics and AI: How can Stakeholder Engagement for One Health Be Meaningful in a Globalized World?

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Efforts to promote stakeholder engagement in health research are often framed as processes to more relevant, impactful, ethical, and equitable outcomes. Yet in practice, engagement frequently risks becoming symbolic rather than resulting in a meaningful redistribution of power. As data moves across national and supranational systems, and as genomic and AI-driven technologies become embedded in healthcare and public health, questions arise about how “stakeholders” are constituted, by whom and to which ends. Rather than taking diversity for granted, it is crucial to interrogate the political work done by calls for diversity: Which actors are invited or excluded? How are expertise and lived experiences valued or sidelined? What specific challenges emerge when engagement is attempted within highly technical, algorithmically mediated, or globally distributed infrastructures? Additionally, this context becomes more complex when incorporating a One Health perspective, which highlights the interdependence of human, animal, and environmental health.

Against this backdrop, and at a time that new forms of engagement (e.g., use of AI chatbots, virtual reality etc.) emerge, we invite empirical research, case studies and conceptual work in the changing meaning of stakeholders and engagement, especially in relation to datafied health and life sciences and globalized genomics, AI and infrastructures, including but not limited to the following questions:

- Where are the stakeholders in the emergent national and supranational largescale infrastructures (such as UK Biobank or EHDS - European Health Data Space) and how are their participation(s) re-configured?
- How can diverse stakeholders be involved in shaping the infrastructures in development (including meta-infrastructures, e.g. EHDS), such as genomics and AI-driven healthcare systems, considering bias, representativity and equity? What forms of power, exclusion, or accountability emerge when stakeholders are asked to engage in the development of genomics and AI-driven healthcare systems?
- How do One Health dynamics (such as climate change, global mobility, antimicrobial resistance, and pandemic preparedness) intersect with expanding data infrastructures, and what tensions or new forms of (dis)engagement arise at these intersections?

Keywords: alternative food networks, community, governance, transition, inclusiveness & social justice

Community Food - Food community: travelling between niche and mainstream

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Community-based food networks have a long history, manifesting in various forms of collective organisation. Examples range from collectively managed common-pool resources (Ostrom, 1990) and consumer cooperatives since the 19th century (Hilson et al., 2017), to forced cooperative entities such as the collective farms (*Kolhozes*) in the Soviet Union.

Market liberalisation and the rise of capitalist organisational forms have fundamentally transformed the entire food system and food environments. These processes have reinforced corporate-controlled value chains and driven a high degree of market concentration. This dynamic results in a dual outcome: the consolidation of market power among a small number of wholesale and retail corporations (Clapp 2023) and the expansion of supermarket-based retail structures characteristic of modernised food systems (Ambikapathi et al., 2022). Austria serves as a notable example, given its exceptionally high supermarket density compared to other countries (Böheim et al., 2016).

However, in recent years, new community-based food networks emerged, such as Community Supported Agriculture, community-based urban farms or gardens, food cooperatives, community-based supermarkets/grocery stores, food saving and food sharing, and community cooking projects. These initiatives seek to challenge the dominant extractivist, unjust and unsustainable food system by re-embedding food production, processing, transport and consumption - sometimes also food waste - geographically (local and regional food networks) and socially (direct marketing, community-based approaches). They are commonly known as Alternative Food Networks (AFNs), Short Food Supply Chains (SFSC), Civic Food Networks (CFNs) or Territorial Food Networks (Gori & Castellini, 2023). However, most lack the ability to attract a wide range of consumers (due to financial, spatial, and temporal constraints as well as social and cultural factors), thus being exclusive (Steinwender et al., 2023). Moreover, most food producers and processors face challenges in logistics, time constraints, pre-justices, and other areas (ibid.). In addition, communities resp. community-based food initiatives are not necessarily empowering but might reproduce social inequalities and foster exclusion (e.g. Defensive Localism, Food Apartheid).

For this session, which will be structured into two parts, we invite contributions that address the following questions:

- Community conceptualisation: How are notions of “community” constructed, negotiated, and maintained within food initiatives?
- Ex-/Inclusiveness: How are social justice, inclusiveness, and aspects of intersectionality addressed or overlooked within such initiatives?
- travelling between niche & mainstream: In what ways do community-based food networks engage with, resist, or adapt to mainstream market logics, policy frameworks, and local food systems/infrastructures?

The first part is dedicated to the presentation of accepted papers, while the 2nd part is devoted to discussing common ground in community food and food communities.

ID: 28

Keywords: GIS, Remote Sensing, Smart Cities

Smart Cities in the Making: Leveraging GIS and Remote Sensing for Sustainable Urban Futures

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As urbanization accelerates, the vision of "smart cities" increasingly shapes the future of urban development. However, the creation of smart cities requires a deep understanding of how technology intersects with the social, political, and ecological dimensions of cities. This session seeks to explore how Geographic Information Systems (GIS) and Remote Sensing are being used to design, manage, and analyze cities in real-time, making them more efficient, sustainable, and inclusive. Through this session, we aim to stimulate critical dialogue about the role of data and technology in shaping urban life and address the promises and pitfalls of creating cities of the future.

We invite contributions that critically examine how GIS and Remote Sensing technologies are being integrated into urban planning and development, with particular attention to their impact on decision-making, governance, and urban society. How are these tools reshaping cities' physical and social landscapes? How do they influence power dynamics and urban inequalities? What is the role of data-driven governance in achieving urban sustainability, resilience, and social justice?

This session will bring together scholars, practitioners, and activists working at the intersection of technology, urban studies, and social sciences, with an emphasis on how these technologies can both promote and hinder the creation of equitable smart cities. We encourage contributions that reflect on ongoing debates and offer innovative, interdisciplinary perspectives that engage with both the potential and the challenges of GIS and Remote Sensing in urban contexts.

Possible Topics for Contribution:

- The role of GIS and Remote Sensing in urban environmental monitoring and disaster management.
- Social, political, and ethical implications of using spatial data for city planning.
- GIS and Remote Sensing as tools for participatory planning and community-based urban interventions.
- The intersection of smart cities with climate change mitigation and adaptation strategies.
- Data privacy, surveillance, and governance in the age of smart cities.
- The impact of remote sensing on monitoring and managing urban inequalities and access to services.

Critical approaches to the use of big data and spatial technologies in urban governance.

We welcome abstracts and articles from scholars, practitioners, and activists working on the intersection of technology, urban development, and social justice. Contributions can take various forms: research papers, theoretical reflections, case studies, or presentations of ongoing projects. We particularly encourage submissions that explore interdisciplinary approaches and engage critically with the complexities and contradictions of using GIS and Remote Sensing in the development of smart cities.

Questions to Consider:

- How are GIS and Remote Sensing technologies influencing the design and governance of smart cities?
- What are the implications of these technologies for social and spatial inequalities in urban areas?
- How can GIS and Remote Sensing tools be used to foster more inclusive and democratic urban futures?
- What critical perspectives should guide the integration of these technologies into urban planning and development?

Join us as we explore how smart cities are being shaped through the lens of GIS and Remote Sensing, and help us rethink how technology can serve both the individual and the collective in the cities of tomorrow.

Keywords: teaching, artificial intelligence, interdisciplinarity, teaching infrastructures, university

Diffraction STS and the Classroom: Teaching and Transforming STS between Epistemic Traditions, Institutional Structures, and Artificial Intelligence

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The classroom is a place where Science & Technology Studies (STS) becomes diffracted and co-created, congeals and transforms. Teaching is a crucial means for the stabilization of and the socialization into a research field. At the same time, academic pursuit today is under ever-greater attack from the sides of “post-truth,” populist “culture wars,” labor precarization, as well as right-wing and neoliberal reshaping. Similarly, technological shifts, and Artificial Intelligence (AI) especially, bring important questions about the material and discursive tradition of thought (back) to the fore. As epistemic and institutional pressures and infrastructures co-create the ways in which STS is taught and comes into being, collective and lasting reflections about how STS perspectives could and should challenge our teaching are important tasks for the field as a whole (see Farías & Sánchez Criado, 2017; Lehner & Eitenberger, 2022). How might we eschew a “residual realism” (Chilvers & Kearnes, 2020) of entrenching a “stock” version of STS? And how can we make STS thought styles gateways for critical engagement with teaching-in-practice ?

Our session aims to elicit conversation about the mutually co-productive relationship between teaching and STS. The session encourages participants (students, pre-docs, post-docs, institutionalized, independent, and precarious researchers) to share teaching approaches, explore experimental pedagogical designs, and discuss current and changing socio-technical configuration(s) of teaching STS. We invite participants to prepare brief introductory statements to the plenary in written, spoken, picture, or any other format before participating in World Café discussion rounds. Topics can center around, but are not limited to, the following streams and related questions:

1) **Canons and Authorship:** What version(s) of STS do we produce when we teach through readings of canonized authors? How can we create more inclusive canons; how can we decolonize the STS curriculum at large? How do we deal with tensions between the situatedness of authors and texts, and their decontextualization in traditions of thought?

2) **Inter- and Transdisciplinarity:** How do we accommodate the different disciplinary backgrounds of students, teachers, and topics while working towards common(ized) STS sensitivities? How do we address the pedagogical challenge of bringing diverse ways of knowing in and out of the academy into conversation? How do epistemic cultures surface and intra-act in the relationships built by teaching and learning STS?

(3) **Institutional Infrastructuring:** How do we navigate institutional boundaries, metrics, labor conditions, and temporalities in the context of teaching? How does teaching inhabit a range of institutional positionalities and relations—with their concomitant affective and material registers? How does STS teaching interact with and become reshaped by academic politics and societal change?

(4) **AI and Digital Technologies:** How can STS help navigate the socio-technical complexities of the digital, and eschew any false dichotomy between uncritically embracing or completely rejecting large language models (LLMs) and digital infrastructuring in teaching? How can digital technologies be integrated, and students and teachers learn to be attentive to their epistemic, politico-economic, and environmental challenges?

Keywords: knowledge transfer, commodification, Open Science, social media, innovation

Between Openness and Commodification – Underrepresented Facets of Knowledge Transfer

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Knowledge transfer in science has traditionally been conceptualized linearly, emphasizing its organization and professionalization, and its manifestation in established forms of scholarly communication (Ruser 2021). However, the struggle for a more holistic perspective on knowledge transfer is ongoing. We want to explore what forms of knowledge transfer have been underrepresented or neglected in STS so far, and how they can be described.

Popular science has travelled new horizons: with the possibilities of social media, researchers have begun to individually transfer their topics and results to broader audiences. At the same time, social media such as TikTok, LinkedIn or Youtube are infamous for fueling consumerism and commodification of social interaction. Therefore, researchers may be tempted to monetize their knowledge and competencies. We want to draw an arc from this phenomenon to other forms of knowledge transfer directed towards economic value creation, such as expressed in patents and spin-offs. While the latter have received more attention outside STS, they can provide crucial insights into innovation capacities of scientific systems (Chu 2021, Tanane 2020) which could add to STS discourses. Moreover, while in many places, research evaluation has indicators on innovation and entrepreneurship included; not-for-profit knowledge transfer of economic value such as defensive publication and foundations are rarely accounted for.

We invite empirical and theoretical contributions on (including, but not limited to) the following aspects:

- What forms of knowledge transfer have been underrepresented or neglected in STS so far, and how can they be described?
- How do commodification and reciprocity through social media change science-society interaction?
- What is expressed and what is overlooked when counting patents and spin-offs, specifically with respect to varying national, institutional, and disciplinary contexts?
- How do these forms of knowledge transfer and their observation interact with processes of economization of academia, open science and distribution issues?
- Which role do disciplines and/or national contexts of scientific production processes play regarding these forms of knowledge transfer?
-

We invite scholars to submit short abstracts (up to 500 words) that engage with these questions, and we look forward to an open discussion of knowledge transfer, including aspects that have so far remained overlooked. Studies, ideas and concepts in all stages of development are welcome.

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Keywords: Standardisation Process, Societal Stakeholders, Public Awareness

Societal Interests and the Technical Standardisation of Systems With Massive Non-Technical Ramifications

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It is safe to say that today the standardisation specifically of Information and Communication Technologies (ICT; this includes Smart Systems and Artificial Intelligence) is almost exclusively informed by technical and economic considerations. In the EU, societal interests are represented by the 'Annex-3-Organisations' (A3Os); ANEC (consumers), ETUI (work force), ECOS (environment) and SBS (small and medium-sized enterprises), respectively. For various reasons (not least monetary ones), this representation is rather limited and highly selective. This is not necessarily a bad thing – the technical nuts and bolts of the vast majority of standards may safely be left to the engineers who typically populate the standards working groups.

This does not hold, however, for technologies like e.g. Smart Systems and Artificial Intelligence, which will have considerable societal, environmental, legal etc. ramifications and which will impact everyone's daily life in unprecedented ways. Here, the absence of input from societal stakeholders creates an untenable situation: Those who will be affected the most from standards and the resultant technologies hardly have a say in their development, if at all.

This session will (hopefully) first discuss if the current situation really needs to be improved in the first place; perhaps things should indeed be left to those with the technical expertise. Here, views are likely to differ between stakeholders. Nevertheless, we will aim to identify potential ways how to adapt the current situation to better reflect societal interests in the standardisation such technologies. Questions to be discussed include, but are by no means limited to

Overall

- Is input from societal stakeholders really necessary for certain technologies?
- ...

Rather more general:

- Is the current representation (by the A3Os) adequate?
- How could societal stakeholders be motivated and enabled to directly contribute to standardisation?
- ...

More specifically:

- How could the general public's awareness of the importance (and ubiquity) of standards be raised?
- Would educational measures (at all levels) help improve the situation? If so, how?
- How could the current process be adapted to better accommodate participation of societal stakeholders (if at all)?

The session will comprise short presentations and a subsequent panel discussion.

Keywords: biodiversity, intersectionality, feminist care theory, nature-society relations, transdisciplinary

Innovation and Intervention for Equitable Nature–Society Transformations

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This session invites critical engagement with the societal, cultural and ethical dimensions of innovation processes and their relationship to interventions aimed at transforming nature–society relations in ways that support both biodiversity and equity. Conceptually, the session is grounded in feminist care theory and more-than-human perspectives, drawing on the work of scholars such as Maria Puig de la Bellacasa, Donna Haraway, and Vinciane Despret. These approaches offer lenses for reimagining innovation as a situated and relational practice of care – attentive to interdependencies, responsibilities, and the entanglements of human and nonhuman worlds.

Innovation is understood here as a social and political process – embedded in everyday practices, shaped by power relations and implicated in the reproduction or transformation of existing inequalities – rather than as a neutral or purely technical endeavour. Framing innovation in relation to intervention opens space for exploring how different forms of intervention – digital, material, organisational or symbolic – are designed and enacted, and how they interact with innovation processes to foster ecological integrity and social justice.

We particularly encourage contributions that:

- Examine how innovation and intervention intersect with diverse social identities and structural inequalities, using intersectionality as an analytical lens.
- Explore the role of reflexivity and positionality in shaping innovation and intervention strategies.
- Analyse participatory and transdisciplinary approaches – such as co-creation workshops, learning communities, and arts-based methods – that link innovation with intervention for transformative biodiversity outcomes.

Offer methodological reflections on designing interventions that actively foster ecological responsibility and social equity.

By bringing together diverse perspectives on the ethics and politics of innovation and intervention, the session aims to deepen understanding of how transformative change can be enacted in practice and to foster dialogue on the conditions under which such change becomes possible, desirable and sustainable.

ID: 33

Keywords: regional innovation cultures, disruption, disruptive technologies, situatedness, change and continuity

Disrupting the Narrative: Regional Innovation Cultures and its Continuities

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The call for disruptive technologies, heralded as engines of economic growth or harbingers of profound breakthroughs for humanity, remains ever-present. The ongoing hype around the “AI revolution” and the promise of quantum technology as the next great leap exemplify this persistent narrative. Yet this panel takes a critical stance: rather than accepting disruption at face value, we seek to deconstruct both the narrative and the normative as well as structural realities that sustain it. Our aim is to interrogate the very concept of disruption by situating major technologies within the contexts in which they actually emerge and become embedded. We ask whether so-called disruptive technologies truly produce ruptures that reshape existing structures, or whether they more often represent continuities that perpetuate them.

This panel explores how innovations are locally embedded and interrogates the plausibility strategies and narratives that legitimize claims of novelty and transformation. It seeks to uncover what epistemic and normative dimensions of technological development are lost when the rhetoric of disruption obscures the incrementalism that quietly steers technological trajectories and stabilizes innovation cultures.

We invite contributions that critically deconstruct the prevailing discourse of disruptive innovation and engage with the dynamics between change and continuity within regionally and locally embedded innovation cultures. We particularly welcome work that challenges dominant assumptions, exposes the often-hidden mechanisms through which technologies are perpetuated, and offers multidimensional perspectives on both the transformative and enduring aspects of innovation.

Keywords: Safe and Sustainable by Design, Ethics, Foresight, Nanotechnology, Advanced Materials

Identifying gaps in social and ethical foresight methodology for nano-enabled advanced technologies

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Partners of the International Networking Initiative on Safe and Sustainable Nanotechnologies (INISS-nano) are joining forces in developing and testing methodologies for Safe, Sustainable and Responsible by Design of nano-enabled advanced technologies.

The aims of this session at STS-Graz 2026 are:

To refine social and ethical foresight with respect to “nano-enabled advanced technologies”. The scope of this topic includes among others Ethical Impact Assessment (e.g. CEN CWA 17145-2, 2017, Malsch et al. 2024, UNESCO, 2023), Ethics by Design (e.g. Francis et al, 2023), Scenario Exploration Systems (e.g. European Commission, 2024), and Narrative ethics (e.g. Baldwin, C. (2015).

We invite participants in STS-Graz to submit papers demonstrating state-of-the-art social and ethical foresight methodology on key enabling technologies and advanced materials, highlighting methodological weaknesses and opportunities for improvement of the methodology and its relevance to real-world impacts of advanced materials and technologies. The aim is to focus the future research agenda in Safe, Sustainable and Responsible by Design of nano-enabled advanced technologies on addressing these identified weaknesses and opportunities for improvement.

After the oral presentations, the session ends with a Mentimeter exercise where participants can vote for the most significant weaknesses and most promising opportunities. Participants are also invited to join INISS-nano: <https://nsc-community.eu/cooperation/>.

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Keywords: Relational Ethics of Technology, Engaged STS, Structural Phenomena, Responsible Innovation, Lived Experiences

Towards a Joint Transdisciplinary Research Agenda of Engaged Science and Technology Studies and Relational Ethics of Technology

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Scholars have long recognized that engaged forms of STS, e.g. concerned with responsible innovation, incorporate applied ethics and makes explicit normative claims and commitments [1]. Sismondo [2] speaks of engaged STS as a discipline concerned with “making science and technology accountable to public interests”, e.g., by challenging established structures. These structures are primarily investigated from the perspective of understanding science and technology development as a social practice. STS can, thus, exhibit an “activist interest” [2]. Relational thinking is an important ingredient in STS analyses, as evidenced by references to, e.g., actor-network or assemblage theory.

Enter relational ethics of technology—a relatively recent iteration of applied ethics that attends to the specific technologically-mediated interactions and relationships that shape human lives and experiences. The approach promotes ethical assessment that prioritizes vulnerable and marginalized perspectives with appropriate epistemic privilege, considering both concrete lived experiences and structural conditions. Connecting the individual and the structural via relational ethics is an urgent topic of research cf., [3], [4], as it is poised to increase our understanding of harmful structures and also of ways to design solutions not necessarily tied to technological fixes, but also to socio-technical structures. Framings of relational ethics as necessarily epistemically inclusive and empowering, e.g., [5], too, signal an “activist interest”. Given that there seem to be striking similarities in their approaches, methodological necessities and repertoires, as well as in their activist tendencies, the session proposes a gathering of scholars from both engaged STS and relational ethics to assess, discuss, and evaluate commonalities and differences, with the ultimate aim of formulating cornerstones of a joint research agenda. One of the foci of the joint investigation is transdisciplinary research, an approach woefully absent in the ethics of technology but called for by relational ethics and mastered by STS.

The session will commence with separate and more detailed portrayals of both fields, followed by a moderated discussion among participants on key topics.

More precisely:

1. The workshop features 5 min. statements of 4 speakers followed by a moderated discussion
2. Conference participants are expected to engage in the discussion and are asked to commit to contributing to a research agenda, compiling discussion inputs, and additional aspects.

Potential contributors:

- G. Rieder, STS & Ethics, U Bergen
- J-C. Heilinger, Phil., U. Witten/Herdecke
- H. Kempt, Ethics, RWTH Aachen
- M. Smolka, STS, U Wageningen
- A. Birhane, Ethics, Trinity College Dublin
- J. Himmelreich, Phil., Syracuse
- M. Boenig-Liptsin, Ethics, ETH Zürich
- K. Huang, Georgetown University

[1] A. Grunwald, “Responsible Innovation: Bringing Together Technology Assessment, Applied Ethics, and STS Research,” *Enterp. Work Innov. Stud.*, vol. 7, pp. 9–31, 2011.

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Keywords: STS, ethics, ethicization

On the ethicization of sociotechnical change: has STS lost its appeal?

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The critical reflexion over emergent technologies has been at heart of the STS scholarship since its earliest days. Especially the analysis of the wider social implications of the complex ways in which the technological and the social come together has contributed to a deeper understanding of contemporary societies in terms of sociotechnical configurations, actor-networks and assemblages. Such understanding is regarded as crucial for the social shaping of technologies and thus to contribute to desirable futures.

Recent developments in the domain of digital technologies and especially in relation to artificial intelligence (AI) have ignited a new wave of public debate, concern, and criticism. Yet, in these debates, the problem is by and large addressed as an ethical problem. With this framing comes a focus on the individual. How are our lives affected by AI? Will AI lead to total surveillance? Will most jobs be redundant? Responding to these profound questions a growing number of scholars strives to answer how ethical algorithms can be designed (Kearns & Roth 2020). Others try to explain how Machine Learning (ML) can be fair (Barocas et al. 2023) or simply declare what AI ethics is (Coeckelbergh 2020)?

Ethical concerns matter and they are broadly shared across academia and beyond. Ethics has been again integrated into curricula as a rediscovered element of engineering education. Funding agencies make ethical considerations mandatory for grant applications. Universities implement ethical committees and advisory boards. Notably, a considerable number of domain scientists shares the concern over undesirable sociotechnical futures and deploys their methods to address ethical challenges. But nonetheless, this focus on the individual neglects the strong and fruitful tradition in STS of seeing things from a broader social, societal and cultural perspective, sensitive to power and structural conditions.

Against this background, we invite contributions that join us in the critical analysis of the described shift that may be best described as ethicization of science and technology.

- What are the implications of such ethical framing?
- How does a focus on ethical problems affect STS scholarship?
- How does the ethicization of science and technology affect interdisciplinary collaboration?
- Why is ethics so appealing and to whom?
- What can STS offer beyond ethical reflexion?
- What are the opportunities of this growing interest in ethics?

Contributions are welcome that address any of the questions above or add to it with other issues relevant for STS scholarship. We especially welcome contributions that link their perspective to ongoing research or teaching practices.