

Introduction to Tensions, Emergence, and Generative Mechanisms in Complex Systems and Platforms Minitrack

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Tensions, emergence, and generative mechanisms are ubiquitous in complex sociotechnical systems in wide ranging contexts including but not limited to e-health, mobile platforms, integrated supply chains, innovation ecosystems, and online communities. Conflicting demands, contradictory practices, and competing views create tension that can energize or inhibit the emergence of effective action and create unintended consequences in complex socio-technical systems. There is a growing literature on tensions, duality, emergence, and generative mechanisms as alternatives to contingency and structural theories. Likewise, complexity theory and agent based modeling are increasingly being used to understand complex social phenomena in information systems and organizational research, particularly in the areas of interdependencies, emergence, and generative science. The track focuses on papers that theoretically or empirically advance our understanding of how tensions, emergence, and generative mechanisms can be leveraged, enhanced, and honed to create new and frame-breaking opportunities, enhance their understanding, and ensure successful co-evolution of complex sociotechnical systems in dynamic environments.

This is the second year for this minitrack. Seven papers are selected for presentation at the conference. The papers address emergence and complexity across a wide range of topics. These papers are organized into two themed sessions.

We sincerely thank the authors for submitting their work to this minitrack and for their role in making it a success. We hope you enjoy the papers and their presentation at the conference.

This minitrack provides an international platform for discussing the following issues of paradoxes and tensions in innovating and implementing change in complex systems:

1. Theoretical foundations and advancements in understanding paradoxes and tensions in socio-technical systems
2. Practical approaches to identifying and managing paradoxes and tensions that emerge in complex systems during innovation and change
3. Paradoxes and tensions at multiple levels of analysis, including groups, organizations and institutions, and in diverse industries including academia, healthcare and music.