## Making sense of messy societal change processes – implications of complexities for theorizing and action

While the need for transformation towards sustainability has widely been recognized, and goals and pathways abound, we know much less about how transformative change actually happens and why it often fails. Such causal understanding is important because it implicitly or explicitly informs what solutions and actions are suggested for addressing pressing issues. Generating causal understanding of complex phenomena characterized by contextual, non-linear and contingent dynamics, that are shaped by human-nature interdependencies, multiple worldviews and values, power and politics is challenging. It requires rethinking causality, acknowledging epistemological plurality, and building theories in collaborative, co-produced ways. I want to explore some of these challenges using examples from governance of fisheries and epidemics, yet they are present in many complex systems.