Preface: Complex Adaptive Systems

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Complex systems are found all around us. Companies, societies, markets, and humans rarely stay in a stable, predictable state for long. Yet all these systems are characterized by the notable persistence of some key attributes which maintain their identities, even as their constituent parts change and adapt to new environments.

- What is it about these systems that define their identity?
- How do we characterize them?
- What are the forces that allow a system to persist, even in the face of a radically new environment?

Our goal is to bring together researchers from diverse fields who study these complex systems using the tools and techniques of complex adaptive systems. We will explore phenomena related to resilience, robustness, and evolvability across various disciplines as one avenue towards exposing common dynamics that are found in these disparate domains.

In the past, knowledge gained in each domain about these effects have remained mostly exclusive to that domain, especially when the disciplines are far apart. It is our belief that by bringing together scholars who study these phenomena, we can leverage a deep knowledge of one domain to gain insight into others.