The exponential increase in the ability to compute, store and exchange massive amount of data is fueling transformative changes in the human condition. It has led to a highly connected world with information being accessible at remote and diverse parts of the world. These strides in data processing, storage and communication technologies are creating large networks of interdependencies covering various devices as well as humans. The challenges of managing the complex networks of interactions can only be addressed with an interdisciplinary approach. This workshop will bring together leading experts in Control and Game Theory, their applications and associated areas to forge new research thrusts to address the challenges posed by distributed, networked, systems. Increasingly, privacy and security concerns are motivating distributed architectures that are resilient to failures of a few subsystems and offer better means to ensure information is not breached. On the methodologies front, automated learning based on data gathered is offering solutions for managing complex systems that are difficult to control/manage using more traditional means of identification with a leaning toward a model-based approach based on fundamental physics-based principles. In this workshop, leading researchers will convene to address topical themes that will delineate the challenges and to offer solution methodologies for the challenges described.