

- **Author:** Steven A. Gabriel
- **Title:** Solving discretely constrained mixed complementarity problems using a median function
- **Abstract:** In this talk we present a novel formulation based on a median function to solve discretely constrained mixed complementarity problems (MCPs). Such problems seek to combine integer (discrete) solutions that are also equilibrium ones and have applications in engineering and economics, e.g., balancing load across a network. Several theoretical results show the correspondence between the easier-to-solve formulations presented and the original discretely constrained MCP. Lastly, the approach is successfully tested on a variety of illustrative examples in energy and transportation that show its versatility.