

## VORträge zum Operations Research

Kolloquium des Instituts für Operations Research

*Zeit:* Montag, 07. Oktober 2024, 17:30 Uhr

*Ort:* **Raum 5.25, Gebäude 01.87**

*Es spricht:* Prof. Dr. Majid Forghani Elahabad,  
University of ABC, Santo Andre, Sao Paulo, Brazil

*Zum Thema:* Exact Methods for Reliability Evaluation of Multistate Flow Networks

Many real-world systems, including communication networks, power grids, transportation systems, supply chains, and manufacturing processes, display complex behavior and can be modeled as multistate flow networks (MFNs). Accurately evaluating the reliability of these MFNs is critical for optimizing resources and supporting informed decision-making. Numerous exact and approximation methods have been explored in the literature for assessing MFN reliability. This presentation provides an overview of exact methods, particularly those based on minimal paths and cuts, and explores potential improvements to existing approaches.

**Die Vorträge zum Operations Research wenden sich an alle Interessierten!**

Bei Rückfragen wenden Sie sich bitte an:  
Prof. Dr. Oliver Grothe, Institut für Operations Research