

**Speaker**

Marc Steinbach

**Title**

"MPCC models and primal heuristics for MINLP in gas networks"

**Abstract**

The lecture addresses MINLP models arising in stationary operation of gas networks. For finding feasible solutions we propose a primal heuristic based on MPCC reformulations of a simplified MINLP in combination with a convexification approach for selecting compressor station configurations. Computational results for a real-life gas network demonstrate that an NLP approach for the MPCC models is successful in finding MINLP-feasible solutions for a large fraction of test cases.

(Joint work with Martin Schmidt)