

INVITATION TO THE DOCTORAL SEMINAR

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**“Nonlinear Energy Network and Heuristic Methods for
Large-scale MINLP”**

📍 N.2.01

📅 Wednesday, 18 December 2019

🕒 10:00 a.m.

Abstract

In this talk I will introduce a nonlinear maximization problem for a simple energy network instance. The network consists of machines to produce heat and a storage tank and it is formulated as a mixed-integer nonlinear programming problem (MINLP). This problem is NP-hard, a large-scale MINLP cannot be solved efficiently by nonlinear solvers. In this talk, I will explain the formulation of the model, the difficulties of this problem and the methods used to solve this problem in practice.

Angelika Wiegele and the Department of Mathematics look forward to seeing you at the talk!