CSC Seminar

SPEAKER

Hamdullah Yuecel

TITLE

Optimal Dirichlet Boundary Control Problems with Uncertain Data

ABSTRACT

This talk focuses on a stochastic Galerkin approximation of elliptic Dirichlet boundary control problems with random input data. The expectation of a tracking cost functional with the deterministic constrained control is minimized. Error estimates are provided for the control and state variables. To solve large linear systems, special emphasis is placed on preconditioning the resulting linear systems. Some numerical experiments are performed to illustrate the validity and efficiency of the proposed approaches.

This is a joint work with Max Winkler from the TU Chemnitz.

Tuesday, April 22, 2025 at 2 pm
seminar room Prigogine