ÇANKAYA UNIVERSITY
FACULTY OF ARTS AND SCIENCES
DEPARTMENT OF MATHEMATICS

SEMINAR

Boundary Control Problems

SPEAKER : **Assoc. Prof. Dr. Hamdullah Yücel**

DATE : **14th December, 2018**

TIME : **15:30**

PLACE : **Çankaya University (Central Campus), R-213**

Abstract

Many real–life applications such as the shape optimization of technological devices, the identification of parameters in environmental processes, and flow control problems lead to optimization problems governed by partial differential equations (PDEs). Especially, boundary control problems plays an important role in modeling of active boundary control of flows. When one is interested in control by blowing and suction on parts of the boundary only, boundary controls with low regularity should be admissible which even may develop jump discontinuities. Therefore, efficient numerical techniques are required to solve such kind of problems. In this talk, we discuss a numerical treatment of linear-quadratic boundary optimal control problems under bilateral bound constraints, which act on a part of boundary conditions, i.e. Dirichlet or Neumann boundary conditions.

All interested are cordially invited.

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