## Přednáška Prof. Dr. Hitay Özbay

2.6.2025 - | Fakulta strojní ČVUT v Praze

Ústav přístrojové a řídicí techniky Fakulty strojní ČVUT v Praze, zve všechny studenty a zaměstnance na přednášku Prof. Dr. Hitay Özbay s tématem "A Tutorial on Robust Control of Distributed Parameter Systems", která proběhne v úterý 10. 6. 2025, od 14.00 hodin, v posluchárně D1-366, na Fakultě strojní ČVUT v Praze.

Přednáška proběhne v angličtině, vstup je volný.

## **Abstract:**

We review some robust control problems for distributed parameter systems, emphasizing systems with time delays. The structure of the H-infinity optimal controller is analyzed; computational and implementation aspects are discussed. Strongly stabilizing controllers are obtained from classical interpolation methods and a small gain approach. We also demonstrate a new family of robust controllers for unstable distributed parameter systems and derive finite-dimensional controllers from this structure. Related open problems are discussed.

## **Biography:**

Hitay Özbay is a Professor of Electrical and Electronics Engineering at Bilkent University, Ankara, Turkey. He received the B.Sc., M.Eng., and PhD degrees from Middle East Technical University (1985), McGill University (1987), and the University of Minnesota (1989), respectively. His prior academic affiliations include the University of Rhode Island (1989-1990) and The Ohio State University (1991-2006), where he was a Professor of Electrical and Computer Engineering before joining Bilkent University. He also held visiting professor positions at INRIA, France (2009-2010) and at the University of California, Davis (2024-2025). Professor Özbay was a member of the Board of Governors of the IEEE Control Systems Society (2017-2019) and a general assembly member of the European Control Association (EUCA), representing Turkey (2013-2019). He served as Associate Editor for many journals, including IEEE Transactions on Automatic Control, SIAM Journal on Control and Optimization, and Automatica. He also served as Vice-Chair of IFAC Technical Committees on Networked Control Systems (2005-2011) and Linear Control Systems (2017-2023). He is a Fellow of IEEE.

http://www.fs.cvut.cz/aktuality/2954-212/prednaska-prof-dr-hitay-zbay