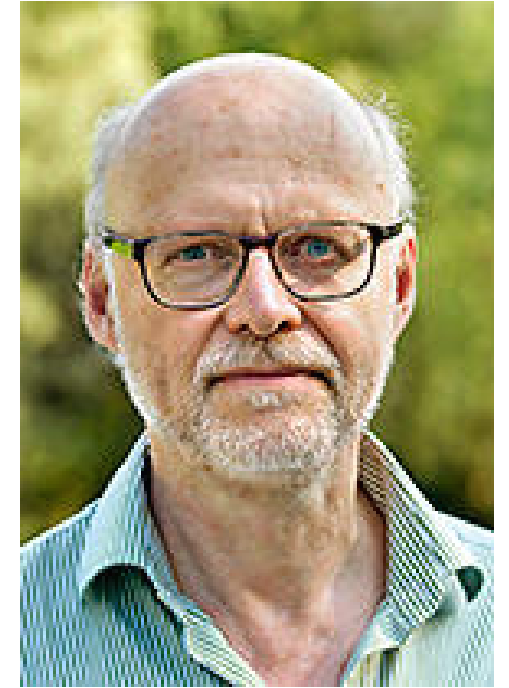


SHORT COURSE AT THE UNIVERSITY OF TEHRAN

# DYNAMICAL SYSTEMS & CONTROL THEORY

FRITZ COLONIUS  
UNIVERSITY OF AUGSBURG



## LECTURE OUTLINE

- INTRODUCTION TO CONTROL
- CONTROLLABILITY AND OBSERVABILITY
- STABILIZATION
- CONTROL SETS AND THE CONTROL FLOW
- SPECTRAL THEORY FOR BILINEAR SYSTEMS
- INVARIANCE ENTROPY AND CONTROL UNDER COMMUNICATION CONSTRAINTS.

## SPEAKER BIOGRAPHY

After early work on functional differential equations, optimal periodic control and parameter identification problems, Fritz Colonius has mainly worked on various aspects of nonlinear systems theory and its relations to deterministic and random dynamical systems. The monograph "The Dynamics of Control", Birkhauser (2000), coauthored with Wolfgang Kliemann, was an acme of this research laying the foundations for much further work. His recent interests include control under information constraints, aspects of piecewise deterministic Markov processes and quasi-stationary measures.

**26-30**  
**JANUARY**

10-12 (MAIN COURSE)  
9-10 (COURSEWORK)  
AFTERNOON (DISCUSSION)

HASHTROODI HALL  
SCHOOL OF MATHEMATICS, STATISTICS AND COMPUTER SCIENCE  
UNIVERSITY OF TEHRAN

**(6-10 BAHMAN)**

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An attendance certificate will be issued at the end of the course.