

Carsten Scherer  
University of Stuttgart

## **Operator Techniques in Controller Synthesis**

### **Abstract**

Feedback control requires to achieve desired robust stability and performance properties for the fractional interconnection of a given plant and a to-be-desired controller, both described by suitable operators. In this talk we develop the basic ideas how to design controllers based on graph separation techniques. It is our goal to illustrate the power of this paradigm for novel approaches to the synthesis of optimal 2D controllers for 2D systems, of controllers that can be adapted to varying dynamic system components or of distributed controllers.

Talk time: 07/21/2016 11:00AM— 07/21/2016 11:30AM

Talk location: Brown Hall 100