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Fachgebiet Regelungssysteme  
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## **Vortragsankündigung**

Seminar Regelungssysteme LV 0430 L 654

Dienstag, 18. Dezember 2012, 15:00 Uhr  
Vortragsort: EN 223

**Dr. Vadim Azhmyakov**  
Departamento de Control Automatico, CINVESTAV, Mexico

“On a Specific Switched-Type Optimal Control Design for Linear Systems”

Our talk is devoted to a LQ-type optimal control problem (OCP) associated with a family of constrained linear systems. We consider control processes governed by linear differential equations with the priori known control switching strategies and quadratic costs functional. The specific piecewise constant structure of the admissible controls under consideration is motivated by variety of concrete engineering applications and moreover, can be interpreted as an application result of some quantization procedures. We propose an implementable numeric algorithm that makes it possible to calculate effectively an approximating solution to the constrained LQ-type OCPs. We discuss theoretic aspects of the obtained computational scheme and also consider an illustrative numerical example.