



CENTRO DE INVESTIGACIÓN Y DE ESTUDIOS AVANZADOS DEL IPN

El Departamento de Control Automático

invita cordialmente a su

Seminario Departamental

**Gain Scheduling control laws for
fin/rudder roll stabilization of ships.
Control of electrical commutations in
ship electrical network.**

Dr. Guy Lebret

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Communications and Cybernetics, Nantes), France**

**Martes 13 de Marzo, 2012, 11:00 horas, Salón de Usos Múltiples,
Planta Baja del Depto. de Control Automático, CINESTAV-IPN, Unidad Zacatenco, D.F.**

Abstract :

Two control applications in maritime domain are described in this talk.

The first one is the roll stabilization of ships (roll attenuation) using fin and rudder actuators. The control is a gain scheduling control with parameters depending on the ship speed and a desired Stabilizing Quality Factor. A video shows tests on a reduced scaled ship in an 80 meters basin.

The second control application describes an electrical load commutations problem in electrical ship network. Based on industrial constraints, an anticipative and optimal control law is proposed. Simulation results are given.

Guy Lebret is interesting in Linear Systems, Robust Control, and Control Methodology.