

Jueves 27

9:50 – 10:00 Registro e Inauguración

Plática plenaria

- 10:00 – 10:45 Alain Bensoussan (Universidad de Texas): *Comparison between martingale methods and dynamic programming.*

- 10:45 – 11:00 Receso

Pláticas

- 11:00 – 11:30 Onésimo Hernández-Lerma (CINVESTAV) *Controlled diffusion processes with cost constraints.*

- 11:30 – 12:00 Daniel Hernández-Hernández (CIMAT) *Robust hedging problem with risk basis.*

- 12:00 – 12:30 David González-Sánchez (CINVESTAV) *Nash equilibria in dynamic potential games from optimal control problems.*

- 12:30 – 12:45 Receso

- 12:45 – 13:15 Angel Soriano (IMP) *An approach to solve a monotone nonlinear boundary problem.*

- 13:15 – 13:45 Ricardo Femat (IPICYT) *Synchronyzation and transitions to chaos in Beta-cells networks.*



Comité Organizador

Onésimo Hernández-Lerma

Héctor Jasso Fuentes

Carlos G. Pacheco González

PROGRAMA

Viernes 28

Plática plenaria

- **10: 00 – 10: 45** George Yin (Universidad de Wayne State):
Switching diffusions and applications.

- **10:45 – 11:00** Receso

Pláticas

- **11:00 – 11:30** Tomás Prieto-Rumeau (UNED):
Linear programming approximations of constrained discounted Markov decision processes.

- **11:30 – 12:00** Ismael Hernández-Noriega (CINVESTAV)
Finite state approximation for continuous-time Markov games with ergodic payoffs.

- **12:00 – 12:30** Oscar Vega Amaya (UniSon)
On the regularity property of semi-Markov processes with Borel state space.

- **12:30 – 12:45** Receso

- **12:45 – 13:15** Daniel López-Barrientos (CINVESTAV, Universidad La Salle)
Policy iteration for zero-sum stochastic differential games with ergodic payoff.

- **13:15 – 13:45** Gerardo Hernández-del-Valle (Universidad de Columbia, Algorithmic Trading Management, LLC):

Optimal execution with jumps (or known structural break points).

Patrocinadores:

Cinvestav

Conacyt

*Red de Modelos Matemáticos y
Computacionales*

Universidad de Sonora

*50 aniversario del Departamento de
Matemáticas del Cinvestav-IPN*



COLOQUIO DE SISTEMAS ESTOCÁSTICOS 2011

**Hotel Holiday Inn- Zócalo
Ciudad de México**

**27 y 28 de octubre
2011**