Around Viability Boundaries Aux Frontières de la Viabilité

December 12-14, 2012

Projet Combinatoire & Optimisation







Wednesday, December 12, Amphi 15 Chairwoman: Hélène Frankowska

- 08:45-09:00 Registration, Lane 15-16, first floor, Room 101
- 09:05-09:10 Wellcome, Hélène Frankowska, Amphi 15
- 09:10-09:25 Opening by George Haddad (UNESCO)
- 09:30-10:10 Bernhard Pierre Option pricing in a tychastic market model
- 10:15-10:55 Cannarsa Piermarco Singularities in dynamic programming
- 11:00-11:30 Coffee Break
- 11:30-12:10 Colombo Rinaldo Confinement problems in individuals population interactions
- 12:15-12:55 Lorenz Thomas Differential equations in (possibly) nonlinear spaces: A short excursion
- 13:00-14:30 Lunch Break
- 14:30-15:10 Gruene Lars On the role of viability in model predictive control
- 15:15-15:55 Goebel Rafal Hybrid Control: How set-valued analysis helps establish robust stability theory
- 16:00-16:30 **Coffee Break**
- 16:30-17:10 Vinter Richard Stability of nonlinear systems with discontinuous control laws
- 17:10-17:50 Caraballo Tomas Stabilizing differential inclusions and PDEs without uniqueness by noise

Thursday, December 13, Lane 15-25, Room 104 Chairman: Georges Haddad

- 09:00-09:40 Danchin Antoine Antifragility and tinkering in biology (and in economy).

 Flexibility is an efficient epigenetic solution for risk management
- 09:45-10:25 **Burnod Yves** Developing cerebral architecture for multiple acquisitions and adaptations by young children
- 10:30-11:10 Peyrieras Nadine Embryonic development as a viability screen for potential evolutionary innovations
- 11:10-11:30 Coffee Break
- 11:30-12:10 Cartelier Jean A model of viability for a monetary economy
- 12:15-12:55 **Lozève Vladimir** Application of viability theory to macroeconomics growth theory and to financial modelling
- 13:00-14:30 Lunch Break
- 14:30-15:10 Dordan Olivier, Chen Luxi Viabilist and tychastic approaches to guaranteed ALM problem
- 15:15-15:55 Terreaux Jean-Philippe Biodiversity evaluation, modelling and viability
- 15:55-16:15 **Coffee Break**
- 16:15-16:55 **Proust Joëlle** Epistemic viability and the dynamics of acceptances
- 17:00-17:40 Besnier Jean-Michel Title to be announced

Friday, December 14, Lane 15-25, Room 104 Chairman: Patrick Saint-Pierre

- 09:00-09:40 Moulin Hervé Impartial division of an euro
- 09:45-10:25 Cornet Bernard Computing and characterizing the cost spread of a financial structure with bid/ask
- 10:25-11:05 Quincampoix Marc Average long time behaviour for optimal control and differential games
- 11:05-11:35 **Coffee Break**
- 11:35-12:15 Najman Laurent, Géraud Thierry Discrete set-valued interpolation in the Alexandrov topology
- 12:15-12:55 Cardaliaguet Pierre On some non standard control problems
- 13:00-14:30 Lunch Break
- 14:30-15:10 Doyen Luc Co-viability modelling for the sustainable management of biodiversity
- 15:10-15:50 Durand Marie-Hélène Sustainability and intergenerational equity
- 15:50-16:20 **Coffee Break**
- 16:20-17:00 Désilles Anya, Fronville Alexandra
- 17:00-17:40 Seube Nicolas Title to be announced
- 17:40-18:00 Open Problems and Conclusions