

At the boundaries of Dynamic Games, Control and Viability

Saint-Nicolas La Chapelle, France
June 19-21, 2014

Thursday, June 19

8:00 – 8:50 Registration

8:50 – 9:00 Welcome address

9:00 – 10:00 Invited talk 1, Chair: Georges Zaccour

Modeling and control in physical, life, and social sciences: some remarks

Pierre Bernhard

10:00 – 10:30 Break

10:30 - 12:30 Contributed Session 1, Chair: Samuel Bates

Viability-based decision: Distance and time criteria

Isabelle Alvarez, Ricardo de Aldama

The viability of French West Indian agrosystems: contributions and limitations of the mathematical theory of viability. Case study in Guadeloupe

Valérie Angeon, Harry Ozier-Lafontaine, Patrick Saint-Pierre, Samuel Bates, Marie-Hélène Durand

Designing the Sustainability of Farms around the Viability Theory

Samuel Bates

Optimal harvesting of a spatial renewable resource

Stefan Behringer, Thorsten Upmann

12:30 – 14:00 Lunch

14:00 – 16:00 Contributed Session 2, Chair: Guillaume Deffuant

Dynamics and Foresight in the Theory of International Environmental Agreements

Michèle Breton

Using CUDA Architecture to Accelerate Multidimensional Viability Kernel Computing

Antoine Brias

Approcher des Noyaux de viabilité avec des surfaces d'étoiles de simplexes

Guillaume Deffuant

Joint maximization incentives in a Closed-loop supply chain

Pietro De Giovanni

16:00 – 16:30 Break

16:30 – 17:30 Tutorial Session, Chair: Pierre Bernhard

Introduction to Mean-field games

Wei Yang

19:30 Diner

Friday, June 20

9:00 – 10:00 Invited talk 2, Chair: Michèle Breton

Robust Computational Analysis of a Stochastic Climate Game Model

Alain Haurie

10:00 – 10:30 Break

10:30 - 12:30 Contributed Session 3, Chair: Marie-Hélène Durand

Application of viability theory in a military scenario: Planning and task assignment for a system of defense

Fengchun Dong

Intergenerational equity

Marie-Hélène Durand

Strategic and intertemporal feedbacks in climate change mitigation vs. adaptation

Louis-Gaëtan Giraudet, Céline Guivarch

Vulnera or Via bility?

Robert Kast

12:30 – 14:00 Lunch

14:00 – 16:00 Contributed Session 4, Chair: Sophie Martin

Safe Cooperative Mission Planning

Stéphane Le Méneç, Vincent Le Doze, Luc Jaulin

Micro/Macro Viability Analysis of Individual-based Models: Investigation into the Viability of a Stylized Agricultural Cooperative

Sophie Martin, Isabelle Alvarez, Patrick Saint-Pierre

Contrôle optimal pour les modèles d'absorption de nutriments entre plantes en sols pollués

Abdennebi Omrane

Designing a soil quality index as an integrated agroecological indicator for the application of the viability theory at the farm level in small islands developing states facing global change

Harry Ozier-Lafontaine, Gladys Loranger, Patrick Saint-Pierre, Valérie Angeon, Samuel Bates, Marie-Hélène Durand, Jean-Louis Diman

16:00 – 16:30 Break

16:30 – 18:00 Contributed Session 5, Chair: Patrick Saint-Pierre

Capturing a Mobile Target with Obstacle under Alternative Uncertainties

Patrick Saint-Pierre, Anya Désille

Optimal commitment

Thomas Weber

Strategic price subsidies for new technologies

Georges Zaccour

19:30 Diner

Saturday, June 21

9:00 – 12:00 Free discussion around numerical developments and modeling issues

12:30 Lunch

Afternoon: free hiking or visiting the village

Evening: Workshop diner.

Sunday, June 22

8:00 Excursion starts for those registered