



LE CONSORTIUM



CENTRE DE RECHERCHES EN ÉCONOMIE ET DROIT
Paris Center for Law and Economics



Decisions, Transitions, Dynamic Analysis, Environmental Problems online GSU-CONSORTIUM-PARIS 2 WORKSHOP

9th September 2024

This workshop is part of the Consortium Project : Décisions et transitions: analyse dynamique et applications aux problèmes environnementaux (2024)

Organizers: Ayşegül Ulus (GSU), Lisa Morhaim (Université Paris-Panthéon-Assas)

Dynamic analysis of decisions and their contexts (economic, legal, environmental) crucially requires interdisciplinary contributions from researchers across different fields, especially those dealing with environmental issues. The **GSU-CONSORTIUM-PARIS 2 WORKSHOP** titled "**Decisions, Transitions, Dynamic Analysis, Environmental Problems**" (September 9, 2024) aims to bring together researchers from various disciplines (economics, mathematics, law) as well as from different subfields and areas of interest.

The project "**Decisions and Transitions: Dynamic Analysis and Applications to Environmental Problems (2024)**" has contributed to the establishment of a sustainable interdisciplinary research partnership between Galatasaray University and Paris-Panthéon-Assas University. This partnership emphasizes both Mathematics and Algorithms, as well as Economics (with implications in Management and Law). Dynamic analysis of decisions requires the development of mathematical tools. Additionally, environmental issues, sustainable management, and their legal regulations depend on our present, past, and future decisions. This project has contributed to providing mathematical tools and innovative models that consider these aspects, which are both implementable and sufficiently general and flexible for use by empirical researchers (data analysis), while being adapted to the needs and challenges of economic analysis.

L'analyse dynamique des décisions et de leurs contextes (économiques, juridiques, environnementaux) nécessite de manière cruciale la contribution interdisciplinaire de chercheurs et chercheuses de différents domaines, en particulier en prise avec les questions environnementales. Le GSU-CONSORTIUM-PARIS2-WORKSHOP: Decisions, Transitions, Dynamic Analysis, Environmental Problems (9 septembre 2024) a pour but de réunir des chercheurs et des chercheuses de différents domaines (économie, mathématiques, droit) et de sous-domaines et centres d'intérêt variés.

Le projet "Décisions et transitions: analyse dynamique et applications aux problèmes environnementaux (2024)" a permis de contribuer à la pérennisation d'un partenariat de recherche pluridisciplinaire entre l'Université de Galatasaray et l'Université Paris-Panthéon-Assas, avec un fort accent d'une part en Mathématiques et Algorithmique, et d'autre part en Economie (avec des implications en Gestion et Droit). L'analyse dynamique des décisions nécessite le développement d'outils mathématiques. De plus, les questions environnementales, de gestion durable, et leurs réglementations juridiques, dépendent de nos décisions présentes, mais aussi passées et futures. Ce projet a permis de contribuer à fournir des outils mathématiques et des modèles innovants permettant de prendre en compte ces aspects, et qui soient à la fois implémentables, suffisamment généraux et souples pour l'utilisation par les chercheurs empiriques (analyse de données), et adaptés aux nécessités et problématiques de l'analyse économique.

Program

11h İstanbul (10h Paris) Opening: Ayşegül Ulus (GSU), Julian Fernandez (Université Paris-Panthéon-Assas and GSU) and Claudine Desrieux (Université Paris-Panthéon-Assas)

11h30 (10h30) Ayşe Sevencan and Emre Çelebi (Yeditepe University) *Institutions, Regulations, and the efficiency of Carbon Tax: An ex-ante analysis of the effect of CBAM on EU's major trade partners' emissions* (E. Çelebi. and A. Sevencan)

11h50 (10h50) Chloé Le Coq (Université Paris-Panthéon-Assas) *Regulation, Compliance, and Proximity: Evidence from Nuclear Safety* (M. Amore, C. Le Coq and S. Schwenen)

12h10 (11h10) Discussion

12h30 (11h30) Dominika Machowska (University of Warsaw) *Hospital competition with age-structured patients and congestion effects: a differential game approach* (M. Kuhn, D. Machowska, A. Nowakowski, A. Wiszniewska-Matyszkiewicz and S. Wrzaczek)

12h50 (11h50) Bilge Öztürk (GSU) *Sustainability attributes and trust in the food market: Complementarity and Substitution* (Dayangaç, R., Hamzaoglu, N.M., Karayel, A. & Öztürk Göktuna, B.)

13h10 (12h10) Discussion

13h30-15h50 (12h30-14h50) Lunch Break

15h50 (14h50) Natalya Ketenci (Yeditepe University) *Determinants of Ecological Footprint: Panel Analysis of 165 Countries in the Period 1990-2020* (N. Ketenci and A. Sevencan)

16h10 (15h10) Agnieszka Wiszniewska-Matyszkiewicz (University of Warsaw) *Infinite horizon optimal control problems with unbounded payoffs: the HJB approach*

16h30 (15h30) Lisa Morhaim (Université Paris-Panthéon-Assas) *Surroundings: history-dependent optimization and applications to circular and sustainable economics* (L.Morhaim and A. Ulus)

16h50 (15h50) Discussion

17h10 (16h10) Svetlana Boyarchenko (University of Texas at Austin) *Two-clock models of learning - rethinking climate change models*

17h30 (16h30) Rabah Amir (University of Iowa) *Optimal dynamic monopoly pricing of green goods under discounted network effects*

17h50 (16h50) Discussion and Conclusion