

Academic Workshop on Electricity Market Design

The goal of this workshop is to bring together researchers in economics and operations research who are interested in analyzing the market rules that govern electricity markets. We are interested in papers that study both short-term and long-term markets: day-ahead and reserve markets, and auctions for capacity remunerations and RES support schemes.

Issues that are of interest are the analysis and policy implications of strategic behavior (unilateral and collusive), market efficiency (static, dynamic, and informational efficiency, inc-dec gaming), auction complexity (simple vs. complex auctions, single vs multiple rounds, regional and spatial granularity, co-optimized markets) and auction design parameters (reserve prices and demand functions, uniform vs. discriminatory auctions, treatment of non-convexities, prequalification requirements, multi-criteria / scoring auctions).

We welcome presentations using diverse methodologies: game theory, empirical analysis, experiments, optimization models, equilibrium modeling, and agent-based modeling.

The workshop will consist of 10 talks, each lasting 40 minutes: a 25-minute presentation by the guest speaker, a 10-minute summary and comments by a discussant, and 5-minute Q&A session with the public.

Location: Campus Saint Louis, Brussels, Belgium

Date: Monday, January 27, 2025, 9:00-18:10.

Local Organizers: Quentin Lété, Bert Willems

Program

Monday, January 27, 2025

8:30 – 9:00: Registration and Welcome

Session 1

09:00 – 09:40: *Welfare Benefits of Transitioning to Co-optimization of Energy and Reserves in Europe*

- Presenter: **Anthony Papavasiliou** (National Technical University of Athens)
- Discussant: **Gauthier de Maere d'Aertrycke** (Engie)

09:40 – 10:20: *The Intraday Market for Power: Liquidity, Immediacy, and Efficiency*

- Presenter: **David Wozabal** (VU Amsterdam)
- Discussant: **Jehum Cho** (Erasmus University Rotterdam)

10:20 – 11:00: *Towards optimal demand-side bidding in parallel auctions for time-shiftable electrical loads*

- Presenter: **Han La Poutré** (TU Delft/CWI)
- Discussant: **Mette Bjørndal** (NHH Bergen)

11:00 – 11:30: Coffee Break

Session 2

11:30 – 12:10: *The benefits and costs of information: Evidence from the New Zealand wholesale electricity market*

- Presenter: **Estelle Cantillon** (Université libre de Bruxelles)
- Discussant: **Marten Ovaere** (Ghent University)

12:10 – 12:50: *Nuclear operations with a high penetration of renewables: the case of France*

- Presenter: **Nicolas Astier** (Paris School of Economics)
- Discussant: **Leticia Pieraerts** (Université libre de Bruxelles)

12:50 – 14:30: Sandwich Lunch

Session 3

14:30 – 15:10: *Multi-unit auctions with uncertain supply and single-unit demand*

- Presenter: **Pär Holmberg** (Research Institute of Industrial Economics, Stockholm)
- Discussant: **Quentin Lété** (UCLouvain)

15:10 – 15:50: *A Small Volume Reduction that Melts Down the Market: Auctions with Endogenous Rationing*

- Presenter: **Marion Ott** (ZEW – Leibniz Centre for European Economic Research)
- Discussant: **Johannes Johnen** (UCLouvain)

15:50 – 16:30: *Designing Auctions for Wind: Project completion and Auction Participation with Precommitment.*

- Presenter: **Silvester van Kooten** (Center for Economic Research and Graduate Education - Economics Institute, Prague)
- Discussant: **Nicolas Stevens** (UCLouvain)

16:30 – 17:00: Coffee Break

Session 4

17:00 – 17:40: *Market-Based Sector Coupling*

- Presenter: **Lesia Mitridati** (Technical University of Denmark)
- Discussant: **Per Agrell** (UCLouvain)

17:40 – 18:10: *Multi-level energy market models with sector coupling under uncertainty*

- Presenter: **Jonas Egerer** (Technische Universität Nürnberg)
- Discussant: **Bert Willems** (UCLouvain)

19:00 – 21:30: Workshop Dinner (Invitation only)

Location: Campus Saint-Louis Bruxelles, Building Préfecture, Rue du Marais 119 – 1000 Bruxelles, Room P02.

This workshop is sponsored by

