

Programme des sessions

28 juillet 2025 à 1 août 2025

**XVII th Conference on Stochastic
Programming**

Mini-symposium

lun. 28 juillet

14:00

Mini-symposium: Advances in two-stages robust optimization

Session | Site: Cauchy | Responsable de session: Michael Poss

14:00 - 14:45 **Connections between Robust and Bilevel Optimization**

Orateur
Marc Goerigk

14:45 - 15:10

A semi-infinite constraint generation algorithm for two-stage robust optimization problems

Orateur
Dr Ayse Arslan

15:10 - 15:35 **Approximating Two-Stage Robust Optimization with K-Adaptability**

Orateur
Jannis Kurtz

15:35 - 16:00

Iterated local search algorithms for adjustable robust optimization problems with discrete budget uncertainty

Orateur
Michael Poss

16:00

14:00

Mini-symposium: Communication-Efficient methods for distributed optimization and federated learning

Session | Site: Navier | Responsable de session: Laurent Condat

14:00 - 14:45 **Communication-efficient distributed optimization algorithms**

Orateur
Dr Laurent Condat

14:45 - 15:10 **Rethinking Optimality in Randomized Decentralized Optimization**

Orateur
Edouard Oyallon

15:10 - 15:35 **Convergence and Linear Speed-Up in Stochastic Federated Learning**

Orateur
Paul Mangold

15:35 - 16:00

In-depth Analysis of Low-rank Matrix Factorisation in a Federated Setting

Orateur
Constantin Philippenko

16:00

16:30

Mini-symposium: Models and Methods for Stochastic Non-Convex Optimization and Equilibrium Problems

Session | **Site:** Navier | **Responsable de session:** Miguel Lejeune

16:30 - 17:15

Using a difference-of-convex (DC) functions approach to solving stochastic mixed complementarity problems with chance constraints for the players.

Orateur

Prof. STEVEN GABRIEL

17:15 - 17:40

Bi-Parameterized Two-Stage Stochastic Min-Max and Min-Min Mixed Integer Programs

Orateur

Manish Bansal

17:40 - 18:05

Capacity investment decisions in equilibrium: a distributionally robust approach

Orateur

Julien Ancel

18:05 - 18:30

Dynamic Operational Planning in Warfare: A Stochastic Game Approach to Military Campaigns

Orateur

Mathieu Dahan

18:30

16:30

Mini-symposium: Robust Optimization and Machine Learning

Session | **Site:** Cauchy | **Responsable de session:** Aras Selvi

16:30 - 17:15

Learning Data-Driven Uncertainty Sets via Mean Robust Optimization

Orateur

Bartolomeo Stellato

17:15 - 17:40

Tractable Robust Markov Decision Processes

Orateur

M. Julien Grand-Clément

17:40 - 18:05

Rectangularity and duality of distributionally robust Markov decision processes

Orateur

Yan Li

18:05 - 18:30

Room for Improvement: Optimal and Fair Housing Allocation via Weakly Coupled Markov Decision Processes

Orateur

Aras Selvi

18:30

mar. 29 juillet

10:45

Mini-symposium: Student Prize

Session | Site: Navier | Responsable de session: Jim Luedtke

10:45 - 11:09

Solving Two-Stage Programs with Endogenous Uncertainty via Random Variable Transformation

Orateur

Maria Carolina Bazotte Corgozinho

11:09 - 11:33

Convex Chance-Constrained Programs with Wasserstein Ambiguity

Orateur

Haoming Shen

11:33 - 11:57

Towards Optimal Offline Reinforcement Learning

Orateur

Mengmeng Li

11:57 - 12:21

Optimizer's Information Criterion: Dissecting and Correcting Bias in Data-Driven Optimization

Orateur

Tianyu Wang

12:21 - 12:45

Multistage Distributionally Robust Mixed-Integer Programming with Decision-Dependent Moment-Based Ambiguity Sets

Orateur

Xian Yu

12:45

10:45

Mini-symposium: Taming the Curse of Dimension in Multistage Stochastic Programming

Session | Site: Caquot | Responsable de session: Yifan Hu

10:45 - 11:30

Contextual Stochastic Bilevel Optimization

Orateur

Daniel Kuhn

11:30 - 11:55

Taming the Curse of Dimension/Horizon in Multistage Stochastic Programming

Orateur

Yifan Hu

11:55 - 12:20

Multilevel Conditional Compositional Estimation and Optimization

Orateur

Buse Şen

12:20

14:00

Mini-symposium: Contextual Stochastic Programming

Session | Site: Navier | Responsables de session: Rohit Kannan, Utsav Sadana

14:00 - 14:45

Advances in contextual stochastic optimization for data-driven decision making under uncertainty

Orateur

Utsav Sadana

14:45 - 15:10

Uncertainty Quantification of Decision Performance in Contextual Stochastic Optimization

Orateur

Tianyu Wang

15:10 - 15:35

Norm-Free Exact Regularization and Applications in Data-Driven Optimization

Orateur

Meng Qi

15:35

14:00

Mini-symposium: Stochastic Mixed-Integer Programming

Session | Site: Caquot | Responsable de session: Ward Romeijnders

14:00 - 14:45

Recent Advances in Solving Multistage Stochastic Mixed-integer Programs

Orateur

Dr Merve Bodur

14:45 - 15:10

On the ReLU Lagrangian Cuts for Stochastic Mixed Integer Programming

Orateur

Weijun Xie

15:10 - 15:35

Enhanced Lagrangian Cuts for Stochastic Mixed-Integer Programming

Orateur

Haoxiang Yang

15:35 - 16:00

Convex approximations for multistage stochastic mixed-integer programs

Orateur

Ward Romeijnders

16:00

mer. 30 juillet

10:45

Mini-symposium: Junior Researcher Prize

Session | Site: Navier | Responsable de session: Wim van Ackooij

10:45 - 11:15

A nonparametric algorithm for optimal stopping based on robust optimization

Orateur

Bradley Sturt

11:15 - 11:45

Finite-Sample Guarantees for Wasserstein Distributionally Robust Optimization: Breaking the Curse of Dimensionality

Orateur

Dr Rui Gao

11:45

10:45

Mini-symposium: Modeling flexibility: new developments

Session | Site: F207

10:45 - 11:30

Stochastic programming as a learning tool

Orateur

Prof. Stein W. Wallace

11:30 - 11:55

Modeling multistage uncertainty with Time Series Foundation Models and Doob decomposition

Orateur

Alan King

11:55 - 12:20

Enhancing Flexibility in Stochastic Programming with Neural Networks

Orateur

Enza Messina

12:20

10:45

Mini-symposium: Robust Decision Making in Dynamic Environments

Session | Site: Caquot | Responsable de session: Mengmeng Li

10:45 - 11:30

Estimation and Prediction Procedures for Unified Robust Decision Models

Orateur

Melvyn Sim

11:30 - 11:55

Towards Optimal Offline Reinforcement Learning

Orateur

Mengmeng Li

11:55 - 12:20

Episodic Bayesian Optimal Control with Unknown Randomness Distributions

Orateur
Enlu Zhou

12:20 - 12:45 **Learning Uncertainty Sets in Dynamic Robust Optimization**

Orateur
Irina Wang

12:45

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10:45

Mini-symposium: Computationally Efficient Approaches for Distributionally Robust Optimization
 Session | Site: Navier | Responsable de session: JIANQIANG CHENG

10:45 - 11:30

Simple Yet Effective Approximations for Optimization under Uncertainty

Orateur
 JIANQIANG CHENG

11:30 - 11:55

The Value of Stochastic Solutions in Adaptive Decision-Making

Orateur
 Ruiwei Jiang

11:55 - 12:20

Distributionally Robust Optimization with Multimodal Decision-Dependent Ambiguity Sets

Orateur
 Beste Basciftci

12:20

10:45

Mini-symposium: Decomposition methods for solving Stochastic Programming problems in Logistics and Transportation
 Session | Site: Caquot | Responsables de session: Daniele Manerba, Francesca Maggioni

10:45 - 11:30

Stochastic programming in freight transportation: connecting theory and practice.

Orateur
 Mike Hewitt

11:30 - 11:55

Progressive Hedging-based approach for combined forward and reverse logistics in hub-and-spoke e-commerce networks

Orateur
 Daniele Manerba

11:55 - 12:20

A Benders decomposition approach for a green bi-objective stochastic fleet size and composition vehicle routing problem.

Orateur
 Paolo Beatrici

12:20 - 12:45

Incorporating decision-dependent demand uncertainty in mobility pricing: a carsharing case

Orateur
 Jiali Deng

12:45

10:45

Mini-symposium: Stochastic Optimization under Decision-Dependent Uncertainty

Session | Site: F107 | Responsable de session: Giovanni Pantuso

10:45 - 11:30

Stochastic Optimization with Decision-Dependent Uncertainty: A Tour D'Horizon

Orateur

Giovanni Pantuso

11:30 - 11:55

Distributionally Robust Chance-Constrained Optimization with Decision-Dependent Support

Orateur

Miguel Lejeune

11:55 - 12:20

Residuals-Based Contextual Distributionally Robust Optimization with Decision-Dependent Uncertainty

Orateur

Xian Yu

12:20 - 12:45

Exact and Approximate Schemes for Robust Optimization Problems with Decision-Dependent Information Discovery

Orateur

Rosario Paradiso

12:45

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10:45

Mini-symposium: Multihorizon Stochastic Programming: Models, Algorithms, and Applications

Session | Site: Navier | Responsable de session: Harsha Gangammanavar

10:45 - 11:30 **Models and algorithms for multihorizon stochastic programming**

Orateur

Prof. Asgeir Tomasgard

11:30 - 11:55 **Handling of long-term storage in multi-horizon stochastic programs**

Orateur

Michal Kaut

11:55 - 12:20

Multi-horizon optimization for domestic renewable energy system design under uncertainty

Orateur

Giovanni Micheli

12:20 - 12:45

The impact of wind uncertainty modelling on power systems investment planning under multi-timescale uncertainty

Orateur

Dr Hongyu Zhang

12:45

10:45

Mini-symposium: Structured learning and stochastic combinatorial optimization: methodological perspectives and applications

Session | Site: Caquot | Responsable de session: Axel Parmentier

10:45 - 11:30 **Combinatorial Optimization-Augmented Machine Learning**

Orateur

Dr Maximilian Schiffer

11:30 - 11:55 **Joint Learning of Energy-based Models and their Partition Function**

Orateur

Dr Mathieu Blondel

11:55 - 12:20

Primal-dual algorithm for contextual stochastic combinatorial optimization

Orateur

Axel Parmentier

12:20