AIRO THEMATIC SECTION: STOCHASTIC PROGRAMMING

2024 ACTIVITIES REPORT

Coordinators: Patrizia Beraldi and Francesca Maggioni

ODS2023 Conference, Badesi – Sardinia (Italy), September 8-12, 2024



Report on Recent Activities

EURO 2024





June 30th – 3rd July 2024, Copenhagen.

Stream on "Stochastic, Robust and Distributionally Robust Optimization"

Organizers: Milos Kopa and Francesca Maggioni

18 sessions and 68 talks

https://euro2024cph.dk/



Report on Recent Activities

Second Copenhagen PhD School of Stochastic Programming



June 25th - 28th 2024, Department of Mathematical Sciences, University of Copenhagen (part of the "Nordic Courses on Stochastic Programming"coordinated with NTNU and NHH).

- Organizers: Giovanni Pantuso and Trine Boomsma
- Speakers: Trine Boomsma, Giovanni Pantuso, Michal Kaut, Asgeir Tomasgard, Francesca Maggioni and Alois Pichler
- Number of participants: 120





Report on Recent Activities

- INTERNATIONAL CONFERENCE ON OPTIMIZATION AND DECISION SCIENCE ODS2024
 - 8-12, 2024 Badesi Sardinia
 - Stream AIRO Thematic Section on Stochastic Programming (organizers: Patrizia Beraldi and Francesca Maggioni)
 - Session 1: Optimization under uncertainty 1
 - Session 2: Optimization under uncertainty 2



• Location: Ischia (NA), Italy

Dates: September 15 – 25, 2024

• Participants: 25 early stage researchers

Supported by AIRO and

Euro Working Group on Stochastic Optimization (**EWGSO**) chair: F. Maggioni Euro Working Group on Commodities and Financial Modelling (**EWGCFM**) chair. R. D'Ecclesia

https://esi2024.unibg.it/



TSL Workshop OPTIMIZING TRANSPORTATION AND LOGISTICS UNDER UNCERTAINTY

- September 25-27, 2024, Nantes (France)
- https://tsl2024.sciencesconf.org/
- Plenary speaker: Francesca Maggioni



WELCOME TO TSL 2024: OPTIMIZING TRANSPORTATION AND LOGISTICS UNDER UNCERTAINTY



Call for Special Issue

Computational Management Science



Special Issue on:

Stochastic Optimization: Methodological Advancements and Modern Applications

Special Issue on the 2nd Copenhagen School of Stochastic Programming (25th-28th June 2024, Copenhagen) and to the joint ECSO-CMS conference (4th-5th July 2024, Stockholm).

Guest Editors:

Giovanni Pantuso, University of Copenhagen Trine Boomsma, University of Copenhagen Francesca Maggioni, University of Bergamo



Deadline for submission: *December 31, 2024*

https://link.springer.com/collections/iiejhcbaee



Annals of Operations Research

Call for Special Issue on "Recent Advances in Stochastic and Robust Optimization"

- Special Issue related to the stream on "Stochastic, Robust and Distributionally Robust Optimization" at EURO 2024 conference
- Guest Editors
 - Milan Hladik, Charles University, Czech Republic
 - Milos Kopa, Charles University, Czech Republic
 - Francesca Maggioni, University of Bergamo, Italy
- Deadline for submission:

30th November, 2024

https://resource-cms.springernature.com/springer-cms/rest/v1/content/26676998/data/v1





Annals of Operations Research

Call for Special Issue on "Decision-making under Uncertainty for Commodities and Financial Markets"

- Special Issue related to ESI 2024 in Ischia (Na)
- Guest Editors
 - Rita L. D'Ecclesia, Sapienza University of Rome, Italy
 - Audrius Kabasinskas, Kaunas University of Technology Kaunas, Lithuania
 - Alois Pichler, TU Chemnitz, Germany
- Deadline for submission:

31th December, 2024

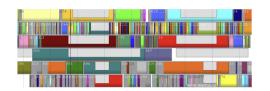
https://resource-cms.springernature.com/springercms/rest/v1/content/26834024/data/v1



Short Courses and seminars

Scheduling seminar series: Speaker: Maria Elena Bruni

Enhancing project resilience: a risk averse approach.



Scheduling seminar

Objective of a virtual seminar on scheduling research and applications is to discuss both the field's newest advancements and survey traditional areas. Seminars take place typically on every second Wednesday through three different time zones (Europe, the Middle East & Africa, North America & South America, and Asia, Australia & Oceania).

PC co-chairs

Feedback

Join us on YouTube



Subscribe to mailing list Subscribe to LinkedIn group



Follow us on Twitter







Approximate Dynamic Programming for **Dynamic Optimization Problems**



VENUE: ROOM MT12, 30C, SECOND FLOOR

ONLINE https://meet.google.com/zkk-wqzf-pkd



JUNE 10-13, 2024

Scheduling:

June 10, 2024

- 9:00-10:30: Modeling sequential decision problems
- 11:15-12:45: Examples

June 11, 2024

- 9:00-10:30: Designing policies
- 11:15-12:45: Examples

June 12, 2024

- 9:00-10:30: Policy search
- 11:15-12:45: Examples

June 13, 2024

- 9:00-10:30: Lookahead policies
- 11:15-12:45: Examples



Prof. Jeffrey W. Ohlmann **University of Iowa**

Jeffrey W. Ohlmann is Associate Professor of Management Sciences and Huneke Research Fellow in the Tippie College of Business at the University of Iowa. His research on the modeling and solution of decisionmaking problems has produced more than two dozen research papers. He has collaborated with companies such as Transfreight, LeanCor, Cargill, the Hamilton County Board of Elections, and three National Football League franchises. Because of the relevance of his work to industry, he was bestowed the George B. Dantzig Dissertation Award.



Current Projects

PRIN 2020 Project "Urban Logistics and sustainable TRAnsportation:
 OPtimization under uncertainTY and MAchine Learning"

UNIBG Research Unit Coordinator and PI: Francesca Maggioni

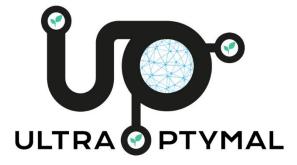
UNIMIB Research Unit Coordinator: Enza Messina

UNIBS Research Unit Coordinator: Daniele Manerba

UNICAL Research Unit Coordinator: Francesca Vocaturo

Web-site: https://ultraoptymal.unibg.it/

Twitter: @ultraoptymal



Network



AIRO THEMATIC SECTION: STOCHASTIC PROGRAMMING

http://www.airo.org/index.php/it/attivita/sezioni-tematiche/programmazione-stocastica



STOCHASTIC PROGRAMMING SOCIETY

www.stoprog.org



EUROPEAN WORKING GROUP ON STOCHASTIC OPTIMIZATION

https://www.mii.lt/ewgso/



News and Perspectives

• **SINERGIES** with:

- COSP https://stoprog.org/cosp-members
- EWGSO https://www.euro-online.org/web/ewg/35/euro-working-group-on-stochastic-optimization
- FIMA, SIMAI and AMASES
- For new memberships write jointly to: patrizia.beraldi@unical.it and francesca.maggioni@unibg.it
- Mailing list address: <u>airosp@googlegroups.com</u>