AIRO THEMATIC SECTION: STOCHASTIC PROGRAMMING

2022 ACTIVITIES REPORT

Coordinators: Patrizia Beraldi and Francesca Maggioni

ODS2022 Conference, Florence, August 30 - September 2, 2022





Workshops and Conferences

• Workshop Robustness and Resilience in Stochastic Optimization and Statistical Learning: Mathematical Foundations

Ettore Majorana Centre, Erice, May 19-25 2022

Organizers: Laurent El Ghaoui, Alejandro Jofré, Francesca Maggioni, Johannes O. Royset

Website: https://workshopsperice2022.github.io/

• ECSO-CMS 2022: Joint European Conference on Stochastic Optimization and Computational Management Science

Venice, 29-30 June, 1 July 2022

Organizers: D. Barro and M. Nardon

Website: https://www.unive.it/pag/38159/

Plenary speakers: Giorgio Consigli, Daniel Kuhn, Darinka Dentcheva, David Morton, Gah-Yi Ban

Mini-symposia on:

- Solution Methods for Uncertain Decision Problems (organizer F. Maggioni)
- Interfaces between Machine Learning and Stochastic Programming (organizer F. Maggioni)



Workshop and Conferences

31 EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH

July 3-6 2022 Espoo, Finland

Organization of the following areas, stream and sessions

- Area on "Queueing and Stochastics" (coordinators A. Alonso Ayuso and F. Maggioni) 4 streams
- Area on "Financial modeling and Risk management" (coordinators N. Krejic and F. Maggioni) 5 streams
- Stream on "Stochastic and Robust Optimization" (coordinators A. Alonso Ayuso, M. Kopa, F. Maggioni)
 - Session: Stochastic Optimization in Energy (organizer Alessio Trivella)
 - Session: Advances in Optimization under Uncertainty 1 (organizers Steffen Rebennack, Markus Gabl)
 - Session: Advances in Optimization under uncertainty 2 (organizers Markus Gabl, Francesca Maggioni)
 - Session: Stochastic Programming in Transportation and Logistics (organizers Francesca Maggioni, Francesca Vocaturo, Manuel Schlenkrich)
 - Session: Dynamic programming and duality in convex stochastic optimization (organizers Teemu Pennanen)
 - Session: Applications of Stochastic Programming (organizers Milos Kopa, Martin Smid)
 - Session: Advances in Stochastic and Robust Optimization (organizers Francesca Maggioni, Johanna Burtscheidt)
 - Session: Stochastic models in manufacturing and services (organizers Raik Stolletz)

INTERNATIONAL CONFERENCE ON OPTIMIZATION AND DECISION SCIENCE ODS2022

Aug. 30 — Sept. 2, 2022 Florence

- Stream on: Optimization under Uncertainty: Theory and Applications (organizers: P. Beraldi and F. Maggioni)
 - Session 1: Advances in Optimization under Uncertainty
 - Session 2: Optimization under Uncertainty in Energy and Logistics

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Advertisement of Forthcoming Events

International Conference on Stochastic Programming (ICSP XVI)
July 24-28, 2023 Davis, California (USA)



Organizers

- Roger J-B Wets, Executive Chair
- David L. Woodruff, Conference Chair Program Committee
- Güzin Bayraksan, The Ohio State University
- YueYue Fan, UC Davis
- Johannes Royset, Naval Postgraduate School
- Jean-Paul Watson, Lawrence Livermore National Laboratory
- Phebe Vayanos, University of Southern California

https://gsm.ucdavis.edu/faculty-and-research/faculty-conferences/xvi-international-conference-stochastic-programming

Nordic PhD course in stochastic programming

October 24-28, 2022, NHH Norwegian School of Economics, Bergen, Norway

Lecturers: Stein W. Wallace, Alan King, Giovanni Pantuso, Stein-Erik Fleten

Credit: 5 ECTS. Requires physical presence plus an approved essay after the course

For questions, contact Stein W. Wallace – stein.wallace@nhh.no

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Call for Special Issues



Computational Management Science

New challenges for optimization methods, models and applications for decision making in complex environments - Stochastic, robust, distributionally robust optimization, artificial intelligence and data analytics

Special Issue on the Joint ECSO-CMS 2022

Guest Editors: Diana Barro, Martina Nardon, Milos Kopa and Stein Wallace

Deadline for submission: *October 31, 2022*



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

For calls and opportunities visit the web-site: https://ultraoptymal.unibg.it/

Twitter: @ultraoptymal



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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>