

PhD TUTORIAL SCHEDULE

Saturday, July 6

14:30-16:00

Models and Overview
Stein W. Wallace

16:00-17:30

Risk-Averse Optimization
Andrzej Ruszczyński

17:45-19:15

Basic Theory
John Birge

Sunday, July 7

09:00-10:30

Scenario generation
Georg Ch. Pflug

10:30-12:00

Stochastic integer programming
François Louveaux

12:15-13:45

Computational methods
Jeff Linderoth

14:30-16:00

Uncertainty quantification and data fusion
Johannes Royset

SCIENTIFIC SCHEDULE

Monday, July 8, Morning

Chair: Giorgio Consigli

Reflections on Dynamic Stochastic Programming: Theory, Computation and Applications
Michael A. H. Dempster

Plenary
 Mon 09:00-10:00

| Advances in stochastic programming and contiguous fields | Problem formulation and solution algorithms | Energy | Finance | Operations Management and Software | Stream |
|---|---|--|--|---|-----------------------------|
| [Room Galeotti] Bounds and SAA methods Chair: Francesca Maggioni | [Room 5] Approaches and Applications of Discrete Decisions in Stochastic Systems Chair: Maarten van der Vlerk | [Room 3] Market evolution and pricing Chair: Raimund Kovacevic | [Room 4] Finance Optimization Chair: William T. Ziemba | [Room 10] Production and capacity planning for stochastic systems Chair: Paolo Brandimarte | Session |
| The impact of the spot price modeling on the electricity portfolio optimization problem Susanne Schröfl | Multi-term Disjunctive Decomposition for Mixed-Integer Recourse in Stochastic Programming Suvrajit Sen | Medium-term planning for thermal electricity production Florentina Paraschiv | A stochastic programming perspective on contingent claims Alan King | Multi-period Supplier Selection under Price Uncertainty Hande Yaman | Parallel Mon 10:45-12:50 |
| Bounds in Multistage Stochastic Programs Francesca Maggioni | Fenchel Disjunctive Decomposition for Mean-Risk Stochastic Integer Programs Lewis Naiman | A Risk Averse Multi-stage Stochastic Optimization Model for Power Generation Expansion Planning: Analysis of Multi-stage Consistency Paolo Pisavella | Optimal Capital Growth With Shortfall Penalties Leonard MacLean | Scenario-Based Stochastic Programming Approach to Capacity Planning Problem under Demand Uncertainty Serkan Kalay | |
| Subgradient Bounds for Convex Dynamic Programs David Brown | Optimization under uncertainty in reverse logistics Nadine Wollenberg | Price dynamics in electricity spot markets Michael Schuerle | Asset-Liability Management via Risk-Sensitive Control Sebastian Lleo | Flow Balancing with Uncertain Demand for Package Sorting Facilities Lata Narva | |
| Two-Stage Stochastic Mixed Integer Linear Programming Jian Cui | Total variation error bounds for convex approximations of two-stage mixed-integer recourse models Ward Hamelkelders | Price setting for energy swing options via stochastic bilevel problems Peter Gross | Understanding and controlling high factor exposures of robust portfolios Min Jaeng Kim | Dealing with end-of-horizon effects in stochastic lot sizing Paolo Brandimarte | |
| | | Pricing of Energy Contracts - From Replication Pricing to Swing Option Pricing Raimund Kovacevic | Applications in Finance - When to sell Apple and the NASDAQ100, the Nikkei and other bubble markets with a stochastic disorder model William T. Ziemba | | |

Monday, July 8, Afternoon

| New Concepts for Stochastic Systems | | New Approaches to Classical Problems | | Computation and Applications | | Finance and Applications | | Stream |
|--|--|---|--|---|--|---|--|-----------------------------------|
| [Room 5] Approximation and stability for complex structural models Chair: Petr Lachout | | [Room 4] Data mining methods for stochastic programming Chair: Miguel A. Lejeune | | [Room 3] Applications and solutions for non-convex SPs Chair: Asgeir Tomasgard | | [Room Galeotti] Dynamic stochastic optimization and Finance Chair: Elena Medova | | Session |
| Rapidly Detecting an Anomaly Spreading Stochastically on a Network <i>David Marton</i> | | Boolean Data Mining Method for Probabilistically Constrained Stochastic Programming Problems <i>Miguel A. Lejeune</i> | | MPECs with Energy Applications Steven A. Gabriel | | The Values of Information and Solution in Stochastic Programming <i>John Birge</i> | | Mini-Symposium Mon 14:00-16:25 |
| Stability of stochastic programming problems and mathematical statistics <i>Edwin Vogel</i> | | Automatic inference of decision rules for multi-stage stochastic programs <i>Boris Hofmann</i> | | A branch-and-bound method for discretely-constrained mathematical programs with equilibrium constraints <i>Mark Linderoth</i> | | "Estimating Animal Spirits" <i>Mark Davis</i> | | |
| Structure of Risk-Averse Multistage Stochastic Programs <i>Ilkka Dupačová</i> | | Clustering-Based Interior-Point Strategies for Stochastic Programs <i>Victor W. Zeng</i> | | Emergency Shelter Design for Geographic and Building Environments using Stochastic and Robust Optimization Elise Miller-Hooks | | Optimal capital allocation and strategic portfolio selection for a large property/casualty insurer <i>Georgio Cavinato</i> | | |
| Stability and Approximation in Stochastic Optimization via L1 Norm <i>Nanna Barkera</i> | | Combinatorial Data Mining Method for Multi-Portfolio Stochastic Asset Allocation <i>Ran D.</i> | | Nonconvex Generalized Benders Decomposition Paul I. Barton | | Risk management and contingent claim valuation in illiquid markets <i>Tiziana Passacant</i> | | |
| Statistic features in stochastic optimization programs <i>Petr Lachout</i> | | Learning policies from solutions of multi-stage programs, illustration on power system applications <i>Bartholomew Coull</i> | | Enhancing Nonconvex Generalized Benders Decomposition With Piecewise Relaxation and Adaptive Parallelization Xiang Li | | ALM Analysis for Pensionskasse: Asset Liability Management Study <i>Francesco Santilli</i> | | |

| Advances in stochastic programming and contiguous fields | | Problem formulation and solution algorithms | | Energy | | Finance | | Operations Management and Software | | Stream |
|---|--|---|--|--|--|--|--|---|--|-----------------------------|
| [Room Galeotti] Risk aversion and stochastic dominance Chair: Darinka Dentcheva | | [Room 5] Multistage mixed-integer stochastic programming Chair: Suvrajeet Sen | | [Room 3] Hydrothermal energy management Chair: Bitu Analui | | [Room 4] Portfolio risk and return analysis Chair: Sergio Ortobelli Lozza | | [Room 10] Supply chain management and networks Chair: Asgeir Tomasgard | | Session |
| Decomposition Methods for Two-stage Stochastic Linear Semidefinite Programs with Risk Aversion <i>Tobias Wolkensberg</i> | | BFC Parallel Implementation <i>Gerardo A. Pérez-Galván</i> | | The value of local electricity storage in a smart grid: How important is intermittency? <i>Pedro Lopes Delgado</i> | | Optimization and performance evaluation in the portfolio selection problem <i>Ortelina Fulgo</i> | | Design of Resilient Supply Chains using Sample Average Approximation (SSA) <i>Pablo García-Herrero</i> | | Parallel Mon 16:55-19:00 |
| Optimization with multivariate stochastic dominance constraints <i>Elis Wolkens</i> | | Parallelized Branch-and-Fix Coordination (P-BFC) for solving large-scale multistage mixed 0-1 problems <i>Gerardo Pérez</i> | | Hydrothermal Unit Commitment Subject to Uncertain Demand and Water Inflows <i>Marilou Beaudin Tremblay</i> | | Comparison of back-testing results for various VaR estimation methods <i>Alex Kravtsov</i> | | The Design of Robust Value-Creating Supply Chain Networks <i>Wenbin Gong</i> | | |
| Optimization with Multivariate Conditional Value-at-Risk Constraints <i>Mihai Neşan</i> | | Decomposition method for linear stochastic bilevel problems <i>Charlotte Henkel</i> | | Determining the variable cost of pumped-storage stations for use in the real-time market <i>Seray Yildirim</i> | | Portfolio selection with European call and put options <i>Martin Lindner</i> | | A multistage stochastic program for production planning in the pig supply chain industry <i>Victor M. Aburto</i> | | |
| Regularization Methods for Stochastic Order Constrained Problems <i>Gabriela Martínez</i> | | | | Combining Sampling-based and Scenario-based Nested Benders' Decomposition Methods: Application to Stochastic Dual Dynamic Programming <i>Wolfram Kuhn</i> | | International portfolio selection with Markov processes and liquidity constraints <i>Sergio Ortobelli Lozza</i> | | Scenario Bundling for a Pre-Disaster Planning Problem Steven Prestwich | | |
| Robustness and bootstrap techniques in portfolio efficiency tests <i>Mihai Neşan</i> | | A matheuristic for a class of multi-stage mixed-integer stochastic programs: application to the maritime fleet renewal problem <i>García Ramón</i> | | An Efficient Parallel Decomposition Approach for Stochastic Dual Dynamic Programming Andre Luiz Diniz | | Risk profile versus portfolio selection <i>Valeria Carraret</i> | | Supply Planning for the Material Use of Renewable Resources <i>Susanne Wiedemann</i> | | |

Chair: Werner Römisch

Stochastic Programming with Probabilistic Constraints
René Heurion

Plenary
Tue 09:00-10:00

| Advances in stochastic programming and contiguous fields | Problem formulation and solution algorithms | Energy | Finance | Operations Management and Software | Stream |
|--|---|--|--|---|-----------------------------|
| [Room Galeotti] Dynamic time consistent risk measures Chair: Tito Homem-de-Mello | [Room 5] Non-Linear and Monte Carlo algorithms Chair: Anton J. Kleywegt | [Room 3] Stochastic models in energy planning Chair: Boris Defourny | [Room 4] Risk control for dynamic portfolios Chair: Diana Barro | [Room 10] Transportation and Logistic Chairs: Francesca Maggioni, Guido Perboli | Session |
| General Dynamic Programming Vincent Loefer | Estimation of Pure Characteristics Demand Models with Pricing Jong-Shi Pang | A stochastic transmission planning model with dependent random variables: wind and load Heejung Park | Improving pension product design Agneska K. Konic | A diversified tabu search approach for the open-pit mine production scheduling problem with metal uncertainty Anna Langhart | Parallel Tue 10:45-12:50 |
| Dynamic Time-Consistent Approximations of Risk Measures Tevfan Asamer | | A L-shaped method for mid-term hydro scheduling under uncertainty Fabian Bastin | Accounting for Risk Measure Ambiguity when Optimizing Financial Positions Erick Delage | Integrated planning of operations and spare parts logistics under uncertainty in the supply chain of maintenance service providers Masoumeh Kazem Zanjani | |
| Consistency and risk averse dynamic decision models: Definition, interpretation and practical consequences. Alexandre Street | Distributed Algorithms for Nonlinear Multistage Stochastic Programs Marc C. Steinbach | Benders Decomposition for solving multi-stage stochastic mixed complementarity problems. Road Igging | Time Consistent Recursive Risk Measures Under Regime Switching and Factor Models and Their Application in Dynamic Portfolio Selection Bo Liu | The Stochastic Generalized Bin Packing Problem Mauro M. Bahi | |
| Risk aversion in multi-stage stochastic programming: a modeling and algorithmic perspective Tito Homem-de-Mello | Hierarchical Bayesian Learning in Neural Networks using Genetic Algorithms Ozan Kocadağlı | Risk Averse Computational Stochastic Programming Somayeh Moazeni | Optimal Liquidation Strategies for Portfolios under Stress Conditions Jorge P. Zabelli | The Stochastic Mixed Capacitated General Routing Problem: formulation and solution approaches Marta Elena Bruen | |
| | A Stochastic Trust Region Algorithm for Mixed Logit Type Problems Anton J. Kleywegt | | Controlling risk in dynamic asset allocation through stochastic optimization Diana Barro | The multi-path Traveling Salesman Problem with stochastic travel costs: a City Logistics computational study Guido Perboli | |

Tuesday, July 9, Afternoon

| New Concepts for Stochastic Systems | New Approaches to Classical Problems | Computation and Applications | Finance and Applications | Stream |
|--|--|--|--|-----------------------------------|
| [Room Galeotti] Exogenous and endogenous uncertainty in SP Chair: Laureano F. Escudero | [Room 4] The Scenario approach to stochastic optimization Chair: Marco C. Campi | [Room 3] Stochastic dominance in stochastic programming Chair: Rüdiger Schultz | [Room 5] Stochastic models in natural resources Chair: Andrés Weintraub | Session |
| Multistage Stochastic Programming for Planning under Endogenous Uncertainty: Models and Algorithms Ignacio E. Grossmann | The scenario approach to decision-making processes Marco C. Campi | Stochastic Dominance Almost Everywhere in SP Rüdiger Schultz | Stochastic Models in Natural Resources Andrés Weintraub | Mini-Symposium Tue 14:00-16:25 |
| Decision dependent distributions and the response surface methodMS: Exogenous and Endogenous Uncertainty in Stochastic Programming Georg M. Pfug | The fundamental theorems of the scenario approach Nimrod Gavath | Time-consistent stochastic orders Bartekka Deuschera | Open-Pit Mine Production Scheduling with Stochastic Programming for Handling Uncertainty in the Mineral Body Marcelia Beldad | |
| Capacity expansion using stochastic programming with decision dependent probabilities Asmita Tripathy | Constraint removal in practice: a case study in portfolio selection theory Bernardo N. Pagnoncelli | On relations between stochastic dominance efficiency tests and DEA-risk models Martin Branda | Medium range optimization of copper extraction planning under uncertainty in future copper prices Ignacio Moreno-Arocas | |
| On multistage mixed 0-1 optimization under a mixture of Exogenous and Endogenous Uncertainty in a risk averse environment Laureano F. Escudero | Reconstructing the distribution of costs from observations Algo Turk | On Stochastic Dominance Constraints measures in multistage mixed 0-1 optimization problems Maria Anacoli Garcia | Use of Stochastic Models in Mining with Progressive Hedging Rubiel Espino | |
| Stochastic Programming Models and Algorithms for Pharmaceutical R&D Planning Christian Maravelias | A Scenario Based Approach to Robust Experiment Design Christian R. Rojas | Equivalents and Algorithms for Programs with Stochastic Order Constraints Induced by Linear Recourse Diebel Drogalis | Modeling and estimating copper prices Ignacio Diaz | |

| Advances in stochastic programming and contiguous fields - 1 | Problem formulation and solution algorithms | In parallel | Finance | Advances in stochastic programming and contiguous fields - 2 | Stream |
|--|---|--|--|--|-----------------------------|
| [Room Galeotti] Optimization under incomplete information Chair: Guzin Bayraksan | [Room 5] L-shaped and Benders' decomposition Chair: Laureano F. Escudero | In parallel | [Room 4] Real and financial derivatives Chair: Alan King | [Room 3] Endogenous uncertainty Chair: Ignacio E. Grossmann | Session |
| On Robust Multistage Stochastic Optimization-with application in Energy Rita Amador | A Generalized Benders' Algorithm for the Two-Stage Stochastic Optimization Problem with Mixed Integer Recourse Anahita Hassanzadeh | SOFTWARE DEMONSTRATIONS WITH HANDS-ON PRACTICE ORGANIZED BY: OPTIRISK SYSTEM [Room 9] Gautam Mitra, Christian Valente and the OptiRisk team UniBg-Allianz Portfolio Optimizer [Room 19] Vittorio Moriggia, Giorgio Consigli and UniBg team | A stochastic programming model for hedging options in a market with transaction costs Mathias Fischerhagen | A trust-region approach for optimization under decision-dependent uncertainty Eric Louis-Nedellet | Parallel Tue 16:55-19:00 |
| Two-stage Stochastic Linear Programs with Incomplete Information on Uncertainty De Han | Improved optimality cuts for the integer L-shaped method Carolina Angulo | | Investing in complementary renewable sources using stochastic-robust optimization and real options Bruno Fommer | Simulation-based SP under Endogenous Uncertainty with Applications in Operations Management Tobias Klein | |
| Stochastic security constrained unit commitment with incomplete information Ruiwei Jiang | Improvements to Benders' decomposition: systematic classification and performance comparison in a Transmission Expansion Planning problem Nora Lanzetta | | Management of Portfolio of Options With Two Expiration Dates Dawid Galambowski | A Stochastic Programming Approach to Risk Mitigation Strategies in Project Management Bruno Flack | |
| On the Use of Phi-Divergences for a Class of Two-Stage Ambiguous Stochastic Programs Guzin Bayraksan | A Benders Decomposition Approach to find the Nucleolus Share of a Renewable Hedge Pool Ismael Garcia | | Analysis and Enhancement of Practice-based Methods for the Real Option Management of Commodity Storage Assets Nicola Aronambardi | Importance Sampling in Stochastic Programming: A Markov Chain Monte Carlo approach Quang Nhu Tran | |

Chair: Mark H. A. Davis

The Decision Rule Approach to Stochastic Programming
Daniel Kuhn

Plenary
 Wed 09:00-10:00

| Advances in stochastic programming and contiguous fields | Problem formulation and solution algorithms | Energy | Finance | Operations Management and Software | Stream |
|--|---|---|---|--|-----------------------------|
| [Room Galeotti] Robust Optimization Chair: Daniel Kuhn | [Room 5] Stochastic Dual Dynamic Programming Chair: Jitka Dupačová | [Room 3] Bidding in electricity market Chairs: Stein-Erik Fleten, Trine Krogh Boomsma | [Room 4] Financial decision making Chair: Janos Mayer | [Room 10] Solvers for Stochastic Optimization Chair: Vittorio Moriggia | Session |
| Minimax stochastic program with overlapping marginals Xuan Vinh Tuan | Conditional Value-at-risk Versus Multidimensional Rule Curves Within the Risk-averse Sddp Approach Debara Dias Jardim Penna | Bidding in sequential electricity markets: The Nordic case Trine Krogh Boomsma | Generalized quantiles as risk measures Fabio Bellini | Stochastic Decomposition: Motivation, technology and the challenges that it presents. Francis Elissen | Parallel Wed 10:45-12:50 |
| Robust combinatorial optimization with cost uncertainty Michael Pinedo | Worst-case-expectation approach to optimization under uncertainty Wajdi Tekaya | Electricity Market Clearing With Improved Scheduling of Stochastic Production Salvador Fdez. Morales | Fixed income management using Stochastic Programming Janus Ekblom | A solver for problems with second-order stochastic dominance constraints Victor Zverovich | |
| Pricing of Multi-Product Monopolistic Cloud Computing Services with Service Level Agreements Vladimir Ryzhik | Representation of non-convexities in stochastic dual dynamic programming applied to hydrothermal operation problems Fernanda S. Thomé | Decomposition for day-ahead bidding of hydro power portfolios - experiences and challenges Erin Klachko | Long-Term Bank Balance Sheet Management: Estimation and Simulation of Risk-Factors John Birge | A Randomized Metaheuristic for Stochastic Integer Programs with Binary First Stage Variables and Continuous Second Stage Variables Christiane Achter | |
| Interdiction Games on Markovian PERT Networks El Ghaoui | Stochastic Dual Dynamic Programming with CVaR Risk Constraints Applied to Hydrothermal Scheduling Luís Carlos Da Costa Jr. | Model of Approximate Dynamic Programming Applied on Day-Ahead Trading of a Renewable Producer of Energy Vadym Demchenko | Portfolio Selection with Objective Functions from Cumulative Prospect Theory Janos Mayer | Valle A computational study of on-demand accuracy level decomposition for two-stage stochastic programs Christian Wolf | |
| | Risk-averse multistage stochastic programming Václav Kocourek | Bidding hydroelectric power via decision rules Stein-Erik Fleten | | An open-source solver system for stochastic programming Hendrik Gassmann | |

Iseo Lake Tour
 and
 Wine Tasting

Wednesday
 Afternoon

Chair: Anton J. Kleywegt

The role of stochastic programming in revenue management
Huseyin Topaloglu

Plenary
 Thu 09:00-10:00

| Advances in stochastic programming and contiguous fields | Problem formulation and solution algorithms | Energy | Finance | Operations Management and Software | Stream |
|--|--|--|--|--|-----------------------------|
| [Room Galeotti] Stochastic Variational Problems Chair: Roger Wets | [Room 5] Scenario generation and Monte Carlo Chair: Vittorio Moriggia | [Room 3] Energy policy Chair: Maria Teresa Vespucci | [Room 4] Financial markets uncertainty modeling Chair: Fabio Bellini | [Room 10] Challenges of engineering and environment applications Chair: Pavel Popela | Session |
| Quasi-Monte Carlo sampling for stochastic variational problems Werner Klenz | Multi-stage stochastic optimization: The distance between stochastic scenario processes Anna Tsamirani | Stochastic optimization of a gas plant with storage taking into account take-or-pay restrictions David Wozabal | | Stochastic programming applied to design and operation planning problems in the field of energy systems Michal Tesař | Parallel Thu 10:45-12:50 |
| Quantitative Stability Analysis of Stochastic Generalized Equations Huibo Tu | How to generate multi-stage scenario trees (if you have to) Ronald Hochreiter | Optimal capital planning with renewable-induced uncertainty using Markov decision processes Athina Vli | Application of skew t-distribution in the field of investors' preferences visualization Ingrida Vaineliute | Recent Advances in Stochastic Quadratic Assignment Problems Radomil Matousek | |
| On the use of epi-splines in stochastic optimization Johannes D. Boyset | On cherry-tree copula based scenario generation Jalilh Kovács | Gas Network Extensions for Multiple Scenarios Jonas Schweiger | An approach of random scaling factor to solve the problem of square root of time and it's application in forecasting of asset return Anastasia Markelova | Recent Advances in Stochastic Programming Modelling for Engineering Applications Pavel Popela | |
| On the Strong Graphical Law of Large Numbers for Random Semi-continuous Mappings and its Applications Vladimir Sorokin | An Effective Heuristic for Multi-stage Stochastic Linear Programming Cesar Beltran-Rayo | An Approximation Scheme for Equilibrium Problems with Risk Aversion Juan Pablo Luna | Superquantile Regression with Applications to Buffered Reliability, Uncertainty Quantification, and Conditional Value-at-Risk Saba I. Miramza | Robust Rescaling Methods for Integrated Water, Food, Energy Security Management under Uncertainty Tatiana Ermolova | |
| On the method of empirical average in some stochastic optimization and estimation problems Pavel S. Kruglov | Stochastic programming handling CVaR in objective and constraints Leonidas Sakalavskas | Stochastic Programming and Optimal Regulation of EU-ETS Pablo Falbo | | On a Limited-Memory Damped-BFGS Method for Large Scale Optimization Mehdi Al-Basil | |

Thursday, July 11, Afternoon

| New Concepts for Stochastic Systems | New Approaches to Classical Problems | Computation and Applications | Finance and Applications | Stream |
|---|--|--|--|-----------------------------------|
| [Room Galeotti] Equilibrium in a stochastic environment Chair: Roger Wets | [Room 4] Time consistency in stochastic programming Chair: Alois Pichler | [Room 3] Computational SP with risk management and energy applications Chair: Csaba I. Fábián | [Room 5] Scenario generation for stochastic programming Chair: Alex Weissensteiner | Session |
| General economic equilibrium with incomplete markets <i>Alejandro Jofre</i> | Introduction to Dynamic Risk-Averse Optimization <i>Andrzej Ruszczyński</i> | How to exploit oracles with on-demand accuracy in energy problems <i>Claudia Sagastizabal</i> | Scenario generation: What are the issues? <i>Stijn W. Wallace</i> | Mini-Symposium Thu 14:00-16:25 |
| Computing equilibrium points in an stochastic two-stages economic model <i>Julio Dussan</i> | Computational Methods for Risk-Averse Undiscounted Transient Markov Models <i>Orkan Cinar</i> | Bundle Methods for Multistage Stochastic Capacity Planning Problems <i>Wolfgang Olsacca</i> | Copula-based heuristic for scenario generation for two-stage stochastic programs <i>Michal Kaut</i> | |
| Stochastic Multiple Optimization Problems with Equilibrium Constraints <i>Michael Ferris</i> | Time consistency of risk measures in markets with transaction costs <i>Birgit Rudloff</i> | Formulation and solver support for optimization under uncertainty <i>Gautam Mitra</i> | A global optimization approach to generate multi-asset, arbitrage-free, scenario trees <i>Andrea Consigli</i> | |
| Supply function equilibrium models for electricity markets <i>Audrey Philbert</i> | Distributionally robust multistage inventory models with moment constraints <i>Lijun Xu</i> | Some Explicit Results for the Distribution Problem of Stochastic Linear Programming <i>Abbas Amarnath</i> | No-Arbitrage Bounds for Scenarios and Financial Optimization <i>Alex Weissensteiner</i> | |
| Incomplete market in stochastic investment equilibrium models <i>Yves Smeers</i> | Time Consistency of Stochastic Programs <i>Alois Pichler</i> | Computational aspects of feasibility issues and risk averse optimization <i>Csaba Fábián</i> | A Simplex Rotation Algorithm for the Factor Approach to Generate Financial Scenarios <i>Michael Hamba</i> | |

| [Room Galeotti] | |
|---|---------------------------------|
| <p>General Assembly Student Paper Prize Next Conference site proposals EWGSP presentation Triannual COSP election</p> | <p>COSP Thu 17:00-19:00</p> |

Chair: Laureano F. Escudero

Risk-Constrained Multi-Stage Wind Power Investment
 Antonio J. Conejo

Plenary
 Fri 09:00-10:00

| Advances in stochastic programming and contiguous fields | Problem formulation and solution algorithms | Energy | Finance | Operations Management and Software | Stream |
|---|--|--|--|---|-----------------------------|
| [Room Galeotti] Chance constrained stochastic programming Chair: René Henrion | [Room 5] Stochastic integer programming methods and applications Chair: Lewis Ntaimo | [Room 3] Renewable sources Chair: Patrizia Beraldi | [Room 4] Scenario generation in finance and energy Chair: Zhiping Chen | [Room 10] Networks and transportation Chair: Alexei A. Gaivoronski | Session |
| Distributionally robust stochastic knapsack problem Jiangqiang Cheng | Integrated Warehouse-Inventory-Transportation Planning under Uncertainty: A Stochastic Integer Quadratically-Constrained Programming Approach Christopher D. Hagmann | Stochastic programming models for optimal location of renewable energy power plants Martus Radulescu | On Solving Dual Level Scenario Tree for the Energy Commercialization Problem in Brazil Vitor Luis de Matos | Bid Generation in Combinatorial Auctions for the Transportation Procurement under Stochastic Winning Prices Chen Trak | Parallel Fri 10:45-12:50 |
| Derivative Formulae for Linear Chance Constraints under Gaussian Distribution Andris Möller | A Stochastic Integer Programming Extended Attack Response Model for Large-Scale Wildfires Michelle M. Alvarado | Integrating wind power into a pure hydro power system via a two-stage stochastic program Ali Koc | A Markov Chain Method to Bootstrap Multivariate Continuous-Valued Stochastic Processes Cristian Pellicani | Optimizing RFID tagging in the aviation industry Shirya Shalizi | |
| Gradient formulae for nonlinear probabilistic constraints with Gaussian and Gaussian-like distributions Wim van Ackooij | A Stochastic Integer Programming Model for the Stochastic ATFM problem Giuseppe Lulli | | Two-Stage Portfolio Optimization with Higher-Order Conditional Measures of Risk Sidd Gulati | Progressive Hedging applied to a Stochastic Fleet Size and Mix Problem Arne Løkketangen | |
| Joint dynamic chance constraints with projected linear decision rules for some multistage stochastic linear programs Vincent Calvez | The Time Slot Allocation Problem under Uncertainty Lara Cornli | A stochastic optimization model for long-term hydropower scheduling Arild Holmeth | Practical scenario tree reduction methods for dynamic portfolio management problem Zhiping Chen | Container transportation problem under uncertain demand and weather conditions Paula Zuddas | |
| Problems in Chance Constrained Network Interdiction Siquian Shen | A distributed scenario decomposition algorithm for stochastic 0-1 optimization Shabbir Ahmed | | Tradable Permits Schemes and New Technology Adoption Lara Tassoni | Bilevel stochastic network problem Alexei A. Gaivoronski | |

Friday, July 12, Afternoon

| New Concepts for Stochastic Systems | New Approaches to Classical Problems | Computation and Applications | Finance and Applications | Stream |
|---|---|---|---|--|
| [Room Galeotti] Stochastic programming and stochastic control Chair: Michel De Lara | [Room 4] Integer Programming Based Approaches for Chance-Constrained SPs Chair: Shabbir Ahmed | [Room 3] Progressive hedging applied to mixed-integer and nonlinear SPs Chair: David L. Woodruff | [Room 5] Asset allocation and ALM for long term investors Chair: Giorgio Consigli | Session |
| Information constraints and discretization puzzles in stochastic optimal control Michel De Lara | Recent Advances for the Solution of Sample-Average Approximations of Chance-Constrained Stochastic Programs James Lawfull | Progressive Hedging Applied to Mixed-Integer and Non-Linear Stochastic Programs David L. Woodruff | Improving Diversification in an Era of Contagion: Optimizing over a Set of Assets and Special Tactics Woo Chang Kim | Mini-Symposium Fri 14:00-16:25 |
| Variational approaches in stochastic optimal control Pierre Carpentier | A Decomposition Algorithm for a Chance-Constrained Program with Recourse Serge Kuchmyrov | Progressive Hedging for Non-Linear Models that Arise in Parameter Estimation Problems Yankai Cao | Factor Models for Scenario Construction in Long Term Asset Allocation Lucrezia Mercari | |
| Dynamic Consistency for Stochastic Optimal Control Problems Jean-Philippe Chancelier | Data-driven Chance Constrained Stochastic Program Yongpei Guan | Progressive Hedging for Stochastic Unit Commitment Jean-François Watson | Practical Examples: Optimizing Dynamic Asset Allocation Strategies with Approximate Dynamic Programming Tamas Koverdiak | |
| Decomposition-coordination methods in stochastic optimal control Jean-Christophe Mala | Mixed-Integer Programming Models for Optimizing Risk Parameter in Chance Constraints Siqian Shen | Progressive Hedging for Stochastic Economic Dispatch with AC Power Flow John D. Sirtada | Relevant short-medium-long term decision criteria for optimal Property & Casualty portfolio selection Massimo Di Tria | |
| European energy equilibrium and decomposition Alex Dellagi | Improved MIP models for chance-constrained problems with probabilistic right-hand sides Ricardo Takahara | A New Lower Bound from Progressive Hedging Sarah M. Ryan | Longevity Risk Management for Individual Investors using Multi-stage Stochastic Programming Krzysztof Szuszcz | |

EWGSP

Kick-off meeting

Chair: Marida Bertocchi

Recent computational advances in solving very large stochastic programs

Jacek Gondzio

Conference closing and See you at SP XIV!

Mini-Symposium
Fri 14:00-16:25

Fri 16:30-17:00

Closing Plenary
Fri 17:00-18:00

Conference Closing
Fri 18:00-18:15