Final Report

General information

The first EURO mini Conference on Stochastic Programming was hosted by the University of Paris Sud. ECSP was initiated by the EURO Group on Stochastic Programming in 2013.

The main topic of ECSP is optimization techniques under uncertainty which pierced through many chapters of business and research applications. The latter challenges are often formulated and solved in a framework of stochastic optimization. Stochastic programming distinguishes by variety of powerfull methods and algorithms however many of that are not implemented and practically used so widely as it is possible. The scope of the EURO Mini Conference *"Stochastic Programming and Energy Applications"* is to overview trends towards latest challenges in stochastic programming and advanced applications to energy and sustainability.

The ECSP registration started on September 24, and lasted three working days, Spetember 24-26. The conference was hosted by the famous institute of Mathematics nad theoritical Physics, namely Institut Henri Poincaré in the heart of Paris.

The program of ECSP consisted of invited and contributed papers. The main topics of the conference concerned mainly SP methods and energy applications :

> Decomposition algorithms for solving large-scale stochastic mixed integer optimization problems, Large-scale stochastic optimization, SP and energy management, SP in Logistics and Transportation, Probabilistic constraints optimization, SP in equilibrium problems, Stochastic integer programming, Risk-averse optimization, Large-scale stochastic optimization, Stochastic telecommunication optimization, SP and Finances, Stochastic nonlinear programming, SP models and solution methods, Risk measures and stochastic dominance…

Committees

During the conference, the organizational duties were distributed between an International **Program Committee** and the local **Organizing Committee** and two conference co-chairs : Abdel Lisser and Georg Pflug.

The **Program Committee** was composed by Pierre Carpentier (ENSTA, France), Frédéric Bonnans (INRIA, France), Sandrine Charousset (EDF, France), Michel de Lara (ENPC, France), Darinka Dentcheva (Stevens University, USA), Laureano F. Escudero (Madrid University, Spain), Csaba Fabian (Budapest University, Hungary), Stein-Erik Fleten (NTNU, Norway), Alexei Gaivoronski (NTNU, Norway), Rene Henrion (WIAS, Germany), Oualid Jouini (ECP, France), Miguel Lejeune (Washington University, USA), Abdel Lisser (University of Paris Sud, France), Francesca Maggioni (University of Bergamo, Italy), Georg Pflug (University of Wien, Austria), Andy Philpott (University of Aukland, New Zealand), Andrzej Ruszczynski (Rutgers University, USA), Leonidas Sakalauskas (University of Vilnius, Lithuania), Ruediger Schultz (University of Essen-Duisburg, Germany), Suvrajeet Sen (University of Southern California, USA), Asgeir Tomasgaard (NTNU, Norway), Maarten van der Vlerk (University of Groningen, Holland) .

The **Organizing Committee** was composed by Abdel Lisser (University of Paris, France), Janqiang Cheng ((University of Paris, France), Chuan Xu (University of Paris, France), Michal Houda (University of Paris, France), Mathilde Excoffier ((University of Paris, France).

Conference program

The conference started on September 24th , at the Institut Henri Poincaré with an Opening and the first session. The Opening session, was chaired by the conference chairs. During this session the participants of the conference were welcomed by Georg Pflug and Abdel Lisser, the co-chairmen of the conference.

The **Scientific Program** included three plenary talks: "*Optimization problems with stochastic order constraints*" by Darinka Dentchiva (Stevens University), "*Probabilistic constraints via nonlinear programming: application to energy management problems*" by René Henrion (WIAS Berlin, Germany), and "Robust 2-stage and multistage optimization, state-space representation of uncertainty, and applications" by Michel Minoux (University of Paris VI, France). More than 75 contributed and invited talks were presented. The majority of the talks were related to energy in terms of applications. More than 70 authors have presented their results, and 85 had attended the conference from 24 of four continents.

Social program

The conference was organized in the heart of Paris. The participants enjoyed our beautiful city, the conference dinner was organized in a beautiful place close to Orsay Museum, called Maison des Polytechiniciens. 40 participants attended and enjoyed a traditional French cuisine dinner.

Special issue

On the occasion of the EURO Mini-conference on Stochastic programming held in Paris 24-26 September 2014, the journal **Informatica** has dedicated a special issue to papers presented, or related to presentations at ECSP.

Support

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Next Euro Conference on Stochastic Programming

The next conference will be organized by Carlo Meloni from Sapienza University in Italy probably in 2017.

On behalf of the Organizing Committee
Abdel Lisser
Paris, France, January, 12th 2015