

SESO 2016 International Thematic Week “Smart Energy and Stochastic Optimization”

P. Carpentier, J.-P. Chancelier and M. De Lara

May 30 to June 3, 2016



Outline of the presentation

- 1 Brief History of SESO
- 2 Thanks to our Sponsors and Partners
- 3 Thanks to the Host Institutions: ENSTA and ENPC
- 4 Coming Soon: SESO Winter School and PGMO Days 2016
- 5 SESO 2016 Program
- 6 Practical Points

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- Energy companies witness a rapidly changing landscape:
 - increase of intermittent, variable and spatially distributed power sources (wind, sun)
 - expansion of markets and actors at all spatial and temporal scales
 - penetration of telecom technologies (smart grids)
- These new factors challenge the management of energy systems and impact the practice of optimization, towards more stochastic and more decentralized optimization
- The SESO Smart Energy and Stochastic Optimization events – International Thematic Weeks and Winter Courses – offer to the academic community and to industrials the state of the art of optimization in the energy transition

- **SESO 2014 International Thematic Week** (June 23 to 27, 2014)
Alexander Shapiro (Georgia Tech, USA)
David Woodruff (UC Davis, USA)
Roger Wets (UC Davis, USA)
- **SESO 2015 International Thematic Week** (June 22 to 26, 2015)
Michel Gendreau (École Polytechnique de Montréal)
Laurent El Ghaoui (UC Berkeley)
Mike Ludkowski (UC Santa Barbara, USA)
Johannes Royset (Naval Postgraduate School, Monterey)
- **SESO 2016 International Thematic Week** (May 30 to June 3, 2016)
Darinka Dentcheva (Stevens Institute of Technology, USA)
Alejandro Jofre (CMM, Universidad de Chile)
Teemu Pennanen (King's College London)
Andrew Philpott (University of Auckland)
R. Tyrrell Rockafellar (University of Washington, Seattle, USA)
Andrzej Ruszczyński (Rutgers University, USA)
- **SESO 2016 Winter Course** (2 to 7 November 2016)

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- **SESO 2016 Winter Course** (2 to 7 November 2016)
*Numerical Methods for Multistage Stochastic Optimization:
Application to Energy Storage Management*
P. Carpentier, J.-P. Chancelier, M. De Lara and V. Leclère
ENSTA and ENPC
- **PGMO Days** (8 to 9 November 2016)
EDF Lab

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- Monday 30 May 2016: – at ENSTA ParisTech
Energy Markets Operations with Renewable Energies
- Tuesday 31 May 2016: – at ENSTA ParisTech
Morning: *Decentralized Optimization, Game Theory and Markets*
- Wednesday 1 June 2016: – at ENPC ParisTech
Tutorials
 - Morning: R. Tyrrell Rockafellar “Risk, Optimization and Statistics”
 - Afternoon: Darinka Dentcheva and Andrzej Ruszczyński
“Risk-Averse Optimization and Control”
- Thursday 2 June 2016: – at ENPC ParisTech
Industry Day on Optimization for Smart Grids
- Friday 3 June 2016: – at ENPC ParisTech
Risk, Optimization and Big Data

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