

CompSust 2012 Conference Schedule

Location: University of Copenhagen Biocenter

Schedule – Master Class

	Wednesday	Location
09:30	Michela Milano Welcome	Room 4-0-24
09:40	Carla Gomes Computational Sustainability	Room 4-0-24
<i>10:00</i>	<i>Coffee</i>	
10:30	Warren Powell Energy and Uncertainty: Navigating the Jungle of Stochastic Optimization	Room 4-0-24
<i>12:00</i>	<i>Lunch</i>	
13:00	Bistra Dilkina Computational Advances in Conservation Planning for Landscape Connectivity	Room 4-0-24
14:00	Luca Benini Sustainable sensing: an enabling technology for computational sustainability	Room 4-0-24
<i>15:00</i>	<i>Coffee</i>	
15:30	Paul Luckowicz Reality Mining for large Scale Social Phenomena Analysis and the concept of the FuturICT Flagship project	Room 4-0-24
16:30	Andreas Krause Submodular Optimization in Computational Sustainability	Room 4-0-24

Schedule – Conference

	Thursday	Location
09:00	09:00 Barry O’Sullivan (Welcome) 09:20 Allan Tucker, Probabilistic Models for Understanding Ecological Data: Case studies in Seeds, Fish and Coral	Lundbeckfond Auditorium
<i>10:00</i>	<i>Coffee</i>	
10:30	10:30 Mohammad Al-Addous, Energy Informatics for Jordan and the Middle East 10:50 Panel: Nurturing the Computational Sustainability Community	Lundbeckfond Auditorium
<i>12:00</i>	<i>Lunch + Poster Set Up</i>	
13:00	1. Smart Grids 2. Species distrib/conserv (1) 3. Renewable Energy	1. Room 4-0-02 2. Room 4-0-10 3. Room 4-0-32
14:00	4. Energy Efficiency 5. Species distrib/conserv (2) 6. Optimisation & Logistics	4. Room 4-0-02 5. Room 4-0-10 6. Room 4-0-32
<i>15:00</i>	<i>Coffee</i>	
15:30	7. Species distrib/conserv (3) 8. ePolicy 9. Water Management	7. Room 4-0-02 8. Room 4-0-10 9. Room 4-0-32
<i>16:30</i>	<i>Break</i>	
17:00	Poster Session (until 19:00)	

Schedule - Conference (cont'd)

	Friday	Location
09:00	09:00 Nick Jennings, Putting the 'Smarts' in the Smart Grid	Lundbeckfond Auditorium
<i>10:00</i>	<i>Coffee</i>	
10:30	10:30 John Quinn, Machine learning applications in developing-world sustainability 11:10 Hartmut Schmeck, Challenges for ICT in Smart Energy and Electric Mobility 11:50 Holger Hermanns, Ensuring Power Grid Stability Despite Renewable Instability	Lundbeckfond Auditorium
<i>12:30</i>	<i>Lunch + Poster Take Down</i>	
13:30	10. Decision Making & Uncertainty 11. Distrib/Obs of Land/Specifies 12. Green ICT	10. Room 4-0-02 11. Room 4-0-10 12. Room 4-0-32
<i>14:30</i>	<i>Short Break</i>	
14:45	13. Incentives 14. Transport 15. Informatics & Education	13. Room 4-0-02 14. Room 4-0-10 15. Room 4-0-32

Invited Speakers

Mohammad Al-Addous

Holger Hermanns

Nick Jennings

John Quinn

Hartmut Schmeck

Allan Tucker

SESSION 1 Smart Grids

Krishnamurthy Dvijotham, Scott Backhaus and Michael Chertkov. Operations-Based Planning for Placement and Sizing of Energy Storage in a Grid With a High Penetration of Renewables (1)

Alice Agogino. Enabling Smart People, Products and Buildings on the Smart Grid (10)

Shantanu Biswas and Deepak Bagchi. Sustainable Smart Grids: An Optimal Auction Mechanism for Virtual Power Plant Formation Problem (15)

SESSION 2 Species distribution/conservation

Truly Santika, Jonathan Rhodes, Clive McAlpine, Kerrie Wilson and Dan Lunney. Assessing spatial priorities for conservation under multiple threats (2)

Ilija Bogunovic, Andreas Krause and Sarah J. Converse. A Tool for Decision Support in Dynamic Conservation Management (11)

Kim Hall, Majid Alkaee Taleghan, H. J. Albers, Mark Crowley and Tom Dietterich. Managing Invasive Species in a River Network (14)

SESSION 3 Renewable energy

Julija Tastu, Pierre Pinson and Henrik Madsen. Accounting for the spatio-temporal effects when forecasting wind power generation (32)

Marco Chiarandini, Niels Kjeldsen and Napoleao Nepomuceno. Benders decomposition for an integrated biomass logistics problem (43)

Ronan Le Bras, Stefano Ermon, Theo Damoulas, Rich Bernstein, Carla Gomes, Bart Selman and R. Bruce Van Dover. Materials Discovery for Fuel Cells: New Opportunities at the Intersection of Constraint Reasoning and Learning (49)

SESSION 4 Energy Efficiency

Gregory Provan and Alberto Venturini. A Stochastic Framework for Energy Modeling, Control and Diagnostics (3)

Daniel Urieli and Peter Stone. Reinforcement Learning for Heat-Pump Thermostat Control (12)

Carlo Manna, Nic Wilson and Kenneth N. Brown. Using Robust Locally Weighted Regression with Adaptive Bandwidth to Predict Occupant Comfort (19)

SESSION 5 Species distribution/conservation (2)

Manfred Jaeger. Factorial Clustering of Species Distribution Data (17)

Saurabh Shanu, Mehak Kapur, Qamar Qureshi, Yadvendra Dev Jhala and Sudepto Bhattacharya. A Graph Theoretic Approach for Modelling Tiger Corridor Network in Western Ghats-Eastern Ghats Landscape Complex, India (25)

Serge Fenet, Adriana Prado and Florent Arthaud. Mining co-variation patterns from ecological data: a process to aid the construction and validation of computer models (27)

SESSION 6 Optimization and Logistics

Ian Hough and Matthew Kling. Reducing air travel's carbon footprint: modeling flight efficiency reveals new opportunities for travelers (9)

Kevin Tierney and Rune Møller Jensen. The Liner Shipping Fleet Repositioning Problem with Cargo Flows (13)

Carles Mateu, Cesar Fernandez, Ramon Bejar, Felip Manyà and Francina Sole-Mauri. Solving The Automated Vacuum Waste Collection Optimization Problem (20)

SESSION 7 Species distribution/conservation (3)

Jean-Yves Courtonne, Julien Alapetite, Pierre-Yves Longaretti, Denis Dupré, Elise Arnaud and Emmanuel Prados. Study of cereals flows at local scales: Examples in the Rhône-Alpes région, the Isère département and the SCOT de Grenoble (33)

Adrian Lopes and Jon Conrad. Poaching and the Dynamics of a Protected Species (46)

SESSION 8 Policy Making (ePolicy project)

Michela Milano, Alan Holland, Barry O'Sullivan, Fabrizio Riguzzi and Marco Gavanelli. WHAT-IF ANALYSIS THROUGH SIMULATION-OPTIMIZATION HYBRIDS (16)

Simone Gabbriellini and Paolo Torroni. Microdebates for policy-making (18)

Tobias Ruppert. The Visual Policy Making Life-Cycle: Supporting Policy Makers with Visual-Interactive ICT Tools for Sustainable Policy Making (23)

Tina Balke. Decision Factors for Individual Photovoltaic Systems Adoption - An Agent-based View

SESSION 9 Water Management

Brent Chamberlain, Alireza Zarei, Hamed Taheri, David Poole, Giuseppe Carenini and Gunilla Öberg. Designing Sustainable Wastewater Systems: Generating Design Alternatives (38)

Brent Chamberlain, Hamed Taheri, Giuseppe Carenini, David Poole and Gunilla Öberg. Designing Sustainable Wastewater Systems: Visual, Interactive Preference Elicitation (39)

Massimiliano Cattafi, Marco Gavanelli, Maddalena Nonato, Andrea Peano, Stefano Alvisi and Marco Franchini. Optimal Placement of Valves in a Water Distribution Network (41)

SESSION 10 Decision Making/Uncertainty

Stefano Ermon, Yexiang Xue, Carla Gomes and Bart Selman. Combinatorial Decision Making in Complex, Uncertain, and Highly Dynamic Environments (31)

Peter Struss. Model-based Environmental Decision Support (34)

Parikshit Dutta, Elise Arnaud, Emmanuel Prados, Mathieu Saujot and Benoit Lefevre. Sensitivity Analysis of a Large Scale Integrated Land Use and Transportation System (35)

SESSION 11 Distribution/observation of land/species

Theo Damoulas, Steven Phillips, Richard Pearson, Michael Loranty, Pieter Beck and Scott Goetz. Machine Learning in the Arctic: Predicting Future Vegetation under Climate Change Scenarios (22)

Sunandan Chakraborty, Scot Dalton, Yaw Nyarko and Lakshminarayanan Subramanian. Computing the Rate of Disappearance of Cropland Using Satellite Images (30)

Bruno Belin, Marc Christie and Charlotte Truchet. Interactive Urban Planning with Local Search Techniques: the SUSTAINS Project (28)

SESSION 12 Green ICT

James Clay and Kevin Wortman. A Durable Flash Memory Search Tree (4)

Birgit Penzenstadler. Supporting Sustainability Aspects in Software Engineering (24)

Sucheta Soundarajan and Carla Gomes. Using Community Detection Methods for Sustainability Applications (37)

SESSION 13 Incentives

Deepak Bagchi, Shantanu Biswas, Yadati Narahari, P. Suresh, N. Viswanadham and S. V. Subrahmanya. Green Supply Chain: A Mechanism Design Approach (42)

Alan Holland, David Parkes and Nicola Secomandi. Counteracting Strategic Behavior in Commodity Storage (44)

Jason Jingshi Li and Boi Faltings. Incentive Schemes for Community Sensing (21)

SESSION 14 Transport

René Schönfelder and Martin Leucker. State-Based Routing for Computational Sustainability (50)

Sabine Storandt, Jochen Eisner and Stefan Funke. Enabling E-Mobility: One Way, Return, and with Loading Stations (51)

SESSION 15 Informatics and Education

Douglas Fisher, Bistra Dilkina, Eric Eaton and Carla Gomes. Incorporating Computational Sustainability into AI Education through a Freely-Available, Collectively-Composed Supplementary Lab Text (47)

Md. Rahimullah Miah. Biodiversity Informatics Design: A Closer Platform across the spectrum of life in technological arena (48)

Diarmuid Grimes, Helmut Simonis, Annabelle Pratt and Charles Sheridan. Automated Energy Usage in the Residential Sector: Impact of Price Tariffs (26)