

ERICE INTERNATIONAL SEMINARS ON PLANETARY EMERGENCIES

47th Session – Erice 12-14 May 2014

Energy, Cities, and the Control of Complex Systems Workshop Preliminary Agenda

Monday, May 12

9:00 – 10:40 Registration / Opening Remarks

Session 1 – Energy and Cities

Introduction – The Challenges of Energy in Cities

Sustainable Urban Development

10:40 - 11:15 Break

11:15 - 12:30 *Urban Policy Choices and Priorities*
The Microgrid Revolution

12:30 - 14:30 Lunch

14:30 - 16:40 **Session 2 – Networks / Control of Complex Systems**

Complex Networks – Dynamics

Complex Networks – Structure

16:40 - 17:15 Break

Session 3 – Energy and Cities II

17:15 - 19:00 *Sustainable City Transport*
Intelligent Energy Systems for Cities
The Urban Energy Transition

19:45 Dinner

Tuesday, May 13

Session 3 (cont'd)

9:00 – 10:15 *Urban Air Quality and Impacts*
Energy & Urban Innovation in One City (Toronto)

10:15 - 10:45 Break

Session 4 – Networks / Control of Complex Systems II

10:45 - 12:30
Control of Network Systems
Control of Complex Networks
Cascade Control and Network Reprogramming

12:30 14:30 Lunch

Session 5 – Energy and Cities III

14:45 - 16:00
Costs of Reducing Global Carbon Emissions
Smart City Innovation

16:00 - 17:45
Session 6 – Networks / Control of Complex Systems III
Living Cities
Cities' Scaling Laws
Economics of Smart Grids

19:45 Dinner

Wednesday, May 14

9:30 - 10:40
Rare Events in Complex Systems
Highly Optimized Tolerance

10:40 - 11:10 Break

11:10 - 11:40 *Energy and Cities Rapporteur*

11:40 - 12:15 *Control of Complex Systems Rapporteur*

12:30 - 14:30 Lunch

14:30 - 15:00 *Discussion*

15:00 - 16:15 **Round Table**
Potential Applications – Limitations – R&D Priorities – City Management Tools - Next Steps

16:15 -
416:30 Closing Remarks (Chair)

19:45 Farewell Dinner