

# E2GC2 : Energy Efficient Grids, Clouds and Clusters

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Green-Net



# Thanks to All PC members and reviewers !

- Cosimo Anglano, Universita' del Piemonte Orientale, Italy
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- Georges Da Costa, IRIT, Toulouse, France
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- Manish Parashar, Rutgers University, USA
- Domenico Talia, Universita' della Calabria, Italy
- David Wallom, Oxford University, UK
- Albert Zomaya, University of Sydney, Australia

# Schedule

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- 3 sessions today !
- **E2GC2 Session 1/3 : 9:00-10:30, October 13, 2009**
  - Green servers :
    - 9:00-9:30 : Takayuki Imada, Mitsuhisa Sato and Hideaki Kimura. Power and QoS Performance Characteristics of Virtualized Servers
    - 9:30-10:00 : Aeiman Gadafi, Daniel Hagimont, Laurent Broto and Jean-Marc Pierson. Autonomic Energy Management of Clustered Applications
    - 10:00-10:30 : Hiroshi Sasaki, Takatsugu Oya, Masaaki Kondo and Hiroshi Nakamura. Power-Performance Modeling of Heterogeneous Cluster-Based Web Servers

# Schedule

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- **E2GC2 Session 2/3 : 11:00-12:30, October 13, 2009**
- Chair : Hiroshi Nakamura, University of Tokyo, Japan
  - Energy efficiency and clouds :
    - 11:00-11:30 : Che-Yuan Tu, Wen-Chieh Kuo, Yao-Tsung Wang and Steven Shiau. E2CC: Building Energy Efficient ClassCloud using DRBL
    - 11:30-12:00 : Miguel Gomez Rodríguez, David Perales Ferrera and Emilio Javier Torres Mateos. An Energy-Aware Design and Reporting Tool for On-Demand Service Infrastructures
  - Energy efficient mapping and scheduling (1/2) :
    - 12:00-12:30 : Yan Ma, Bin Gong and Lida Zou. Energy-Efficient Scheduling Algorithm of Task Dependent Graph on DVS-Unable Cluster System

# Schedule

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- **E2GC2 Session 3/3 : 15:30-17:00, October 13, 2009**
- Chair : Miguel Gomez, Telefonica, Spain
  - Energy efficient mapping and scheduling (2/2) :
    - 15:30-16:00 : Damien Borgetto, Georges Da Costa, Jean-Marc Pierson and Amal Sayah. Energy-Aware Resource Allocation Energy efficient storage :
    - 16:00-16:30 : Olga Mordvinova, Julian Martin Kunkel, Christian Baun and Thomas Ludwig. USB Flash Drives as an Energy Efficiency Storage Alternative
    - 16:30-17:00 : DongKyu Lee and Kern Koh. PDC-NH: Popular Data Concentration on NAND Flash and Hard Disk Drive (paper postponed to Thursday)

# Why do we must succeed ?

- CO2 Cost of IT = cost of airline industry
- Example : Lyon-Banff : 3676 kg of Co2 (2 times the amount the earth can tolerate per person per annum in order to stop growth in the greenhouse effect)
- For E2GC2 : 29 tons of CO2
- In France : reducing of 1 kw/year == 770 kg of Co2 / 500 e
- So let's benefit of these days to enforce collaborations and launch initiatives in Green Grids, Clouds and Clusters ☺

