



# Session 5: Architectural Patterns for Autonomic Computing

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Session Chair: **Marin Litoiu**, *IBM*



# Agenda

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- 1. The WSDM of Autonomic Computing: Experiences in Implementing Autonomic Web Services**  
*Pat Martin, W. Powley, Queen's University, Canada; K. Wilson, CA Inc., USA W. Tian, T. Xu, and J. Zebedee, Queen's University, Canada*
- 2. A Real-Time Pattern Based Approach to Autonomic Computing**  
*Bogdan Solomon and D. Ionescu, University of Ottawa, Canada  
M. Litoiu and M. Mihaescu, IBM Canada Ltd., Canada*
- 3. A Proposal for an Autonomic Grid Management System**  
*Ron Desmarais and H.A. Müller, University of Victoria, Canada*
- 4. Implementing Adaptive Performance Management in Server Applications**  
*Jenny Liu, National ICT Australia, Australia and  
I. Gorton, Pacific Northwest National Laboratory, USA*
- 5. Discussion (30 min)**



# Discussion points

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- What role the computational model plays in the AC architecture?
  - Interactive versus grid workloads
  - Centralized/hierarchical versus decentralized
- Is a run-time quantitative model of the system sine-qua-non?
  - Performance, reliability, behavioral, etc?
- How do we better link design, deployment and operational solutions?
- Can we go beyond self-optimization?
- Leveraging solutions from other domains (control, networking, database)