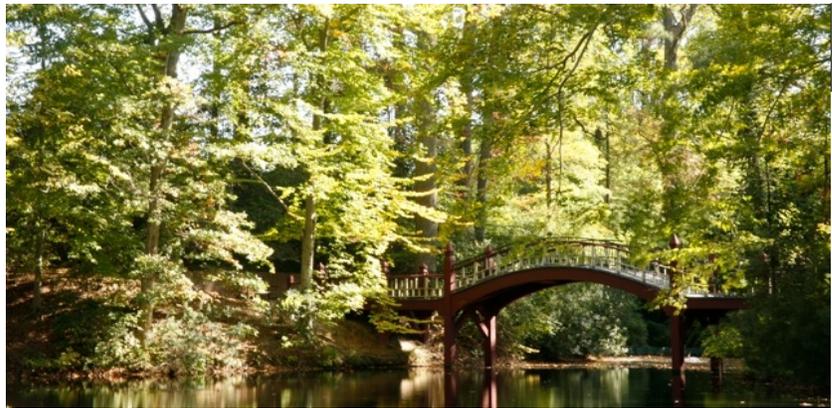# NSMC '10

Numerical Solution of Markov Chains '10

6th International Workshop on the Numerical Solution of Markov Chains
September 16 - 17, 2010, College of William & Mary, Computer Science Department, USA.
Co-located with QEST 2010, 7th International Conference on the Quantitative Evaluation of SysTems

Topics of Interest

Include, but are not limited to:

- Matrix generation techniques and storage
  - Stochastic automata networks
  - Application-oriented interfaces
  - Sparse matrix technologies
  - Very large state spaces
- Computation of stationary probability vectors
  - Direct solution methods
  - Iterative solution methods
  - Matrix geometric solutions

- Domain decomposition methods
- Hierarchical and aggregation/disaggregation methods
- Preconditioning and incomplete factorizations
- Computation of transient solutions
  - Randomization/uniformization
  - O.D.E. & P.D.E. Solvers
- Computation of other measures: first passage times, etc.

- Approximations
  - Aggregation/disaggregation
  - Truncations
  - Bounds
  - Kronecker approximations
- Markov reward models
- Sensitivity analysis
- Optimization
- Simulations
- Parallel implementations

- Markov chain applications to:
  - Information retrieval
  - Computer performance modelling
  - Telecommunication modelling
  - Biological systems
  - Financial and economic applications
  - Others ... not necessarily from the CS area
  - P.C. Demonstrations

Submissions

For the workshop, (extended) abstracts are to be submitted. They must be in English and should not exceed 4 pages in IEEE double-column format. They must be unpublished and must not be submitted for publication elsewhere. Those that are accepted will appear in the workshop proceedings, and must be presented by one of the authors. Submissions will be handled by the EasyChair system. Full papers will be submitted to a special issue of the journal Numerical Linear Algebra with Applications (NLAA) after the workshop.

General Chairs
Peter Kemper (US)
Evgenia Smirni (US)

Program Co-chairs
Michele Benzi (US)
Tugrul Dayar (TR)

Local Organization Chair
Ruth Lamprecht (US)

Publicity Chair
Giuliano Casale (UK)

Program Committee

Invited Speaker

William J. Stewart (US)

Deadlines

(Extended) abstracts : April 2, 2010
Notification : May 14, 2010
Workshop : September 16-17, 2010
Full papers : October 1, 2010

Nail Akar (TR)	Holger Hermanns (DE)	Ivo Marek (CZ)	William H. Sanders (US)
Dario Bini (IT)	Jane Hillston (UK)	Raymond Marie (FR)	Roger B. Sidje (US)
Peter Buchholz (DE)	Ilse Ipsen (US)	Beatrice Meini (IT)	Daniel B. Szyld (US)
Susanna Donatelli (IT)	Joost-Pieter Katoen (DE)	Carl D. Meyer (US)	Miklos Telek (HU)
Jean-Michel Fourneau (FR)	Stephen Kirkland (IE)	Andrew S. Miner (US)	Kishor S. Trivedi (US)
Reinhard German (DE)	William J. Knottenbelt (UK)	Harry Perros (US)	Benny Van Houdt (BE)
Wilfried Gansterer (AT)	Udo R. Krieger (DE)	Brigitte Plateau (FR)	Jean-Marc Vincent (FR)
Boudewijn Haverkort (NL)	Amy N. Langville (US)	Ivana Pultarova (CZ)	Verena Wolf (DE)

For more information, visit http://www.cs.bilkent.edu.tr/~nsmc10