



2003 Illinois International Multiconference on Measurement, Modelling, and
Evaluation of Computer-Communication Systems:
PNPM ♦ Tools ♦ NSMC ♦ PMCCS

September 2-7, 2003 Urbana and Monticello, Illinois, USA

Sponsored by the Coordinated Science Laboratory at the University of Illinois

PMCCS-6 Final Program

the Sixth International Workshop on Performability Modeling of Computer and Communication Systems

PMCCS-6 Co-Organizers:

Andrea Bobbio, Italy
Daniel D. Deavours, USA
Yua Ma, USA

*All technical sessions will be held in the Library in the main house.
All meals will be served in the Dining Room in the main house.*

Friday, September 5

6:30 p.m.	Welcome reception (in Main House atrium) & registration (at guest check-in desk in Allerton Main House)
7:00 p.m.	Dinner

Saturday, September 6

8:00-9:00 a.m.	Breakfast
9:00-9:05 a.m.	Welcome message from co-organizers Andrea Bobbio, Daniel D. Deavours, and Yue Ma
9:05-10:20 a.m.	<i>Session 1: Algorithms I</i> Bounded Decomposition of Stochastic Models <i>David Daly and William H. Sanders</i> Moment Conversions for Discrete Distributions <i>Armin Heindl and Appie van de Liefvoort</i> Optimization of Failure Detection Retry Times <i>Aad P. A. van Moorsel and Katinka Wolter</i>
10:20-10:50 a.m.	Break
10:50 a.m.-12:30 p.m.	<i>Session 2: Algorithms II</i> Faster Discrete-event Simulation Through Structural Caching <i>Gianfranco Ciardo and Yingjie Lan</i> MTBDD-based Activity-Local State Graph Generation <i>Kai Lampka and Markus Siegle</i> Model Checking pathCSL <i>Lucia Cloth, Boudewijn Haverkort, Holger Hermanns, Joost-Pieter Katoen, and Christel Baier</i> Regenerative Simulation of Stochastic Petri Nets with Discrete and Continuous Timing <i>Rob Jones and Gianfranco Ciardo</i>

Saturday, September 6, cont.

12:30-2:00 p.m.	Lunch
2:00-3:30 p.m.	Walking tour of Allerton Park gardens
3:30-4:45 p.m.	Session 3: Applications I
	Modeling a Car Safety Controller Using Fluid Stochastic Petri Nets <i>A. Bobbio, M. Gribaudo, and A. Horváth</i>
	Performability Modeling of Coordinated Software and Hardware Fault Tolerance <i>Ann T. Tai and William H. Sanders</i>
	Perspectives on Performability Evaluation in the ProC/B Toolset <i>Markus Fischer and Peter Kemper</i>
4:45-5:10 p.m.	Break
5:10-6:00 p.m.	Session 4: Algorithms III
	Analytic moment and correlation matching for MAP(2)s <i>Armin Heindl</i>
	An Approximate Analysis of Two Class WFQ Systems <i>G. Horváth and M. Telek</i>
6:00-6:30 p.m.	Break
6:30-8:00 p.m.	Dinner
8:00-10:00 p.m.	Dessert reception (in Main House atrium)

Sunday, September 7

8:00-9:00 a.m.	Breakfast
9:00-9:05 a.m.	Welcome and announcements
9:05-10:20 a.m.	Session 5: Applications II
	The Influence of Layered System Structure on Strategies for Software Rejuvenation <i>Olivia Das and C. Murray Woodside</i>
	Analytic Model of Stream Control Transmission Protocol <i>Zhengliang Yi, Tarek Saadawi, and Myung Lee</i>
	Performability Analysis of Response Time in Communications Systems <i>Jamal N. Al-Karaki</i>
10:20-10:50 a.m.	Break
10:50 a.m.-12:05 p.m.	Session 6: Algorithms IV
	A Stochastic Extension of the Logic PDL <i>Matthias Kuntz and Markus Siegle</i>
	A Generalisation of the Well-Specified Check <i>Holger Hermanns and Daulet Turetayev</i>
	Using Distance to Improve State Classification of Markov Chains <i>Andrew Miner and Shuxing Cheng</i>
12:05-12:15 p.m.	Closing remarks
12:15-1:30 p.m.	Lunch
1:30-2:00 p.m.	Checkout

PMCCS Steering Committee:

Boudewijn R. Haverkort (The Netherlands), Jean-Claude Laprie (France), Raymond Marie (France), John F. Meyer (USA), William H. Sanders (USA), Edmundo A. de Souza e Silva (Brazil), and Kishor S. Trivedi (USA)