

# Preface

The need to evaluate computer and communication systems performance and dependability is continuously growing as a consequence of both the increasing complexity of systems and the user requirements in terms of timing behaviour. The 10th International Conference on Modelling Techniques and Tools for Computer Performance Evaluation, held in Palma in September 1998, was organised with the aim of creating a forum in which both theoreticians and practitioners could interchange recent techniques, tools, and experiences in these areas. This meeting follows the predecessor conferences of this series:

1984 Paris	1988 Palma	1994 Wien
1985 Sophia Antipolis	1991 Torino	1995 Heidelberg
1987 Paris	1992 Edinburgh	1997 Saint Malo

The tradition of this conference series continued this year where many high quality papers were submitted. The Programme Committee had a difficult task in selecting the best papers. Many fine papers could not be included in the program due to space constraints. All accepted papers are included in this volume. Also, a set of submissions describing performance modelling tools was transformed into tool presentations and demonstrations. A brief description of these tools is included in this volume. The following table gives the overall statistics for the submissions.

Country	Submitted	Accepted	Invited	Tool
Argentina	$\frac{4}{5}$			
Brazil	1			
Canada	$4\frac{2}{3}$	$2\frac{2}{3}$		
France	$9\frac{1}{5}$	$2\frac{2}{3}$		$1\frac{1}{3}$
Germany	$8\frac{2}{3}$	4	1	2
India	1			
Ireland	3			
Israel	1			
Italy	$6\frac{1}{6}$	$1\frac{2}{3}$		
Jordan	$\frac{1}{3}$			
Poland	$\frac{2}{3}$			$\frac{2}{3}$
Singapore	1			
Spain	$12\frac{3}{4}$	$3\frac{3}{4}$		1
South Africa	$\frac{1}{2}$	$\frac{1}{2}$		
Sweden	1			
The Netherlands	1	1		
United Kingdom	$3\frac{1}{2}$	$1\frac{1}{2}$		
USA	$12\frac{1}{2}$	7	1	4
Venezuela	$\frac{1}{4}$	$\frac{1}{4}$		
<b>Total</b>	69	25	9	

The papers address important problems from the application and theoretical viewpoints. The sessions Software Performance Tools, Network Performance, Measurement and Modelling Tools, Case Studies, and Software Performance Evaluation Methods contain papers addressing application problems. The sessions Algorithmic Techniques, Petri Net Techniques and MVA Techniques contain papers addressing theoretical aspects of performance evaluation.

It is impossible to close this text without acknowledging the efforts made by several people to help ensure the success of the conference. I express my thanks to

- The Programme Committee members for the task of reviewing papers and selecting the best of them.
- The external reviewers, without whose help the task of the Programme Committee would become impossible.
- The Organising Committee members, all from Universitat de les Illes Balears, without whose dedicated work the conference could not be set up.
- The scientific societies who have co-organised this conference.
- All public and private organisations that have supported the conference in some way (funding, offering services, or lending material).

Palma, September 1998

Ramon Puigjaner

# Programme Committee

## Chairman

Ramon Puigjaner

## Members

Gianfranco Balbo, Italy  
Heinz Beilner, Germany  
Maria Calzarossa, Italy  
Adrian Conway, USA  
Larry Dowdy, USA  
Günter Haring, Austria  
Peter Harrison, UK  
Boudewijn Haverkort, Germany  
Peter Hughes, UK  
Raj Jain, USA  
Pieter Kritzinger, South Africa  
Jacques Labetoulle, France  
Allen Malony, USA  
Raymond Marie, France  
Luisa Massari, Italy  
Richard Muntz, USA  
Ahmed Patel, Ireland  
Brigitte Plateau, France  
Rob Pooley, UK

Guy Pujolle, France  
Daniel Reed, USA  
Martin Reiser, Switzerland  
Gerardo Rubino, France  
William Sanders, USA  
Herb Schwetman, USA  
Giuseppe Serazzi, Italy  
Bartomeu Serra, Spain  
Juan-José Serrano, Spain  
Kenneth C. Sevcik, Canada  
Connie Smith, USA  
Arne Solvberg, Norway  
Edmundo de Souza e Silva, Brazil  
Otto Spaniol, Germany  
William Stewart, USA  
Hideaki Takagi, Japan  
Yutaka Takahashi, Japan  
Satish Tripathi, USA  
Kishor Trivedi, USA

## Secretary

Nunzio Savino

# Organising Committee

## Chairman

Bartomeu Serra

## Members

Bartomeu Adrover	Roser Lluch
Maribel Barcel	Josep Mañas
Josep Frau	

## Referees

Andreas van Almsick  
Juan-Luis Anciano  
Gianfranco Balbo  
Falko Bause  
Heinz Beilner  
Guillem Bernat  
Madhu Bhabuta  
Henrik Bohnenkamp  
Peter Buchholz  
Maria Carla Calzarossa  
Adrian Conway  
Paolo Cremonesi  
Larry Dowdy  
Pedro Gil  
Sonia Fahmy  
Tony Field  
Claudio Gennaro  
Mukul Goyal  
Rohit Goyal  
Gnter Haring  
Peter Harrison  
Boudewijn Haverkort  
Peter Hughes  
Raj Jain  
Kamyar Kanani  
Peter Kemper  
Joao-Paulo Kitajima  
William Knottenbelt  
Pieter Kritzinger  
Jacques Labetoulle  
Christoph Lindemann  
Chunlei Liu  
Glenn R. Luecke

Allen Malony  
Raymond Marie  
Luisa Massari  
Richard Muntz  
Rafael Ors  
Alexander Ost  
Ahmed Patel  
Brigitte Plateau  
Rob Pooley  
Ramon Puigjaner  
Guy Pujolle  
Daniel Reed  
Martin Reiser  
Gerardo Rubino  
William H. Sanders  
Vicente Santonja  
Nunzio Savino  
Herb Schwetman  
Giuseppe Serazzi  
Bartomeu Serra  
Juan-Jos Serrano  
Kenneth C. Sevcik  
Connie U. Smith  
Arne Solvberg  
Edmundo A. de Souza e Silva  
Otto Spaniol  
William Stewart  
Hideaki Takagi  
Yutaka Takahashi  
Satish Tripathi  
Kishor Trivedi  
Lloyd G. Williams

This conference was organised by

**Universitat de les Illes Balears**

in co-operation with:

**ACM Sigmetrics**

**IFIP Working Group 6.3 (Performance of Computer Networks)**

**IFIP Working Group 7.3 (Computer System Modelling)**

With the sponsorship of:

**Ajuntament de Palma**

**Conselleria d'Educació, Cultura i Esports del Govern Balear**

**Direcció General de Tecnologies de la Informació i Comunicacions del Govern Balear**

We gratefully acknowledge the support, of various types, of:

**Banca March, S.A.**

**BMC**

**Caixa d'Estalvis de Balears, Sa Nostra**

**Digital Equipment Corporation Espaa**

**Silicon Graphics**

**Sun Microsystems Ibérica**

**Telefónica de España, S.A.**

**TransTOOLS, S.A.**

Computer Performance Evaluation

Modelling Techniques and Tools

Puigjaner, R.; Savino, N.N.; Serra, B. (Eds.)

1998, XIII, 376 p. 151 illus., 11 illus. in color., Softcover

ISBN: 978-3-540-64949-6