

Preface

This volume contains the proceedings of the 19th annual International Conference on Application and Theory of Petri Nets. The aim of the Petri net conference is to create a forum for the dissemination of the latest results in the application and theory of Petri nets. It always takes place in the last week of June. Typically there are 150 - 200 participants. About one third of these come from industry while the rest are from universities and research institutions.

The conferences and a number of other activities are coordinated by a steering committee with the following members: G. Balbo (Italy), J. Billington (Australia), G. De Michelis (Italy), C. Girault (France), K. Jensen (Denmark), S. Kumagai (Japan), T. Murata (USA), C.A. Petri (Germany; honorary member), W. Reisig (Germany), G. Roucairol (France), G. Rozenberg (The Netherlands; chairman), M. Silva (Spain).

The 19th conference has been organized for the first time in Portugal, by the Department of Electrical Engineering of the Faculty of Sciences and Technology of the New University of Lisbon, together with the Center for Intelligent Robotics of UNINOVA. It takes place in Lisbon at the same time as EXPO'98, the last world exhibition of the 20th century. Although this exhibition is devoted to the Oceans, this coincidence should not feed the misunderstanding that Petri nets have to do with fishing!

Other activities before and during the conference include: an exhibition and presentation of Petri net tools; introductory tutorials; two advanced tutorials on the state space explosion problem and on Petri nets and production systems; a workshop on net-based concepts, models, techniques, and tools for workflow management; and a workshop on hardware design and Petri nets. The tutorial notes and proceedings of the workshops are not published in these proceedings but copies are available from the organizers.

We received 58 submissions from 18 countries and 17 have been accepted for presentation. Invited lectures are given by A. Arnold (France), G. Chiola (Italy), and R. Valk (Germany). The submitted papers were evaluated by a program committee with the following members: G. Balbo (Italy), D. Buchs (Switzerland), G. Chiola (Italy), D. Ciardo (USA), J. Desel (Germany; co-chair), M. Diaz (France), S. Haddad (France), K. Jensen (Denmark), C. Lakos (Tasmania), M. Koutny (England), S. Kumagai (Japan), G. Nutt (USA), K. Onaga (Japan), W. Penczek (Poland), L. Pomello (Italy), M. Silva (Spain; co-chair), P.S. Thiagarajan (India), W.M.P. van der Aalst (The Netherlands), R. Valk (Germany), and W. Vogler (Germany). The program committee meeting took place at the New University of Lisbon.

We should like to express our gratitude to all authors of submitted papers, to the members of the program committee, and to the referees who assisted them. The names of the referees are listed on the following page. For the local organization of the conference, we greatly appreciate the efforts of all members of the organizing committee: A. Costa, A. Steiger-Garção (co-chair), H. Pinheiro-Pita, J.-P. Barros, J.-P. Pimentão, and Luís Gomes (co-chair). The organizing committee wishes to thank Fundação Calouste Gulbenkian for their sponsoring, which partially supported the publication of these proceedings.

Finally, we should like to acknowledge excellent cooperation with Alfred Hofmann of Springer-Verlag and his colleagues in the preparation of this volume.

List of Referees

K. Ajami	J.G. Hall	M. Pezzé
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P. Azéma	J.S. Huang	P. Racloz
C. Balzarotti	J.-M. Ilié	L. Recalde
S. Barbey	R. Janicki	H. Reijers
L. Baresi	L. Jenner	M. Ribaldo
T. Basten	R.L. Jones	R.-C. Riemann
F. Bause	G. Juanole	S. Römer
M. Bernado	G. Juhas	A. Romanovsky
L. Bernardinello	N. Kato	N. Sabadini
E. Best	K. Kedara	M. Sanders
J. Billington	E. Kindler	M. Scarpa
F. Bobbio	H. Klaudel	R. Schätzle
S. Brandt	H.C.M. Kleijn	K. Schmidt
M. Buffo	B. Konikowska	P. Senac
N. Busi	L.M. Kristensen	M. Sereno
J. Campos	O. Kummer	C. Simone
L. Capra	K. Lautenbach	E. Smith
S. Christensen	D.-I. Lee	L. Somers
C. Clo	A. Maggiolo-Schettini	M. Srebrny
J.M. Colom	T. Matsumoto	M.-O. Stehr
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F. De Cindio	J. McWhirter	K. Takahashi
G. De Michelis	A.S. Miner	A. Taubin
A. Diagne	J. Mirkowski	E. Teruel
G. Di Marzo	T. Miyamoto	R. van de Toorn
R. Devillers	D. Moldt	N. Uchihira
S. Donatelli	D. Montesi	T. Ushio
J. Esparza	P. Moreaux	J. Vachon
B. Farwer	K.H. Mortensen	R. Valette
G. Ferrari	M. Mukund	F. Vernadat
W. Fraczak	T. Murata	I. Vernier
G. Franceschinis	M. Nakamura	M. Voorhoeve
R. Gaeta	P. Niebert	F. Wallner
H.J. Genrich	M. Nielsen	R.F.C. Walters
P. Godefroid	A. Ohta	T. Watanabe
U. Goltz	K. Onogi	W. Weitz
R. Gorrieri	A. Pagnoni	F. Wienberg
A. Griff	E. Paviot-Adet	J. Winkowski
N. Guelfi	E. Pelz	J. van der Woude
S. Haar	C. Péraire	A. Yakovlev