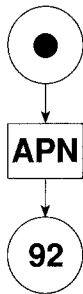


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Preface

The main aims of the series of volumes "Advances in Petri Nets" are:

- (1) to present to the "outside" scientific community a fair picture of recent advances in the area of Petri nets, and
- (2) to encourage those interested in the applications and the theory of concurrent systems to take a closer look at Petri nets and then join the group of researchers working in this fascinating and challenging area.

The ESPRIT Basic Research Action DEMON (DEsign Methods based On Nets) has been a focus of developments within the Petri nets community for the last three years. The research done within DEMON spans many areas of Petri nets; it has certainly helped to consolidate and unify the knowledge about Petri nets, and it has led to many new developments. Hence, it fits the aims of "Advances" to have a special volume presenting some of the achievements of DEMON.

The papers presented in this volume have been selected from 24 papers submitted to "Advances" in response to a call for papers directed to participants of DEMON. The papers went through the refereeing process, and those that were accepted appear in this volume in a revised form.

This volume contains technical contributions giving insight into a number of major achievements of the DEMON project. It also contains four survey papers covering important research areas: basic net models and modular net classes, structural techniques in performance analysis of Petri net models, recognizable languages of infinite traces, and equivalence notions for net based systems. These surveys certainly help the reader to get an overview of a broad range of research taking place in the area of Petri nets and related models of concurrent systems. The volume begins with a description of DEMON given by its coordinator E. Best.

I want to thank E. Best for his help in preparing this volume. Special thanks go to the referees of the papers in this volume who very often are responsible for considerable improvements. The referees were: L. Aceto, M. Ajmone Marsan, E. Astesiano, J. Baeten, J. Billington, W. Brauer, M. Broy, A. Corradini, F. De Cindio, Ph. Darondeau, P. Degano, J. Desel, R. Devillers, C. Diamantini, V. Diekert, H. Ehrig, J. Esparza, U. Goltz, R. Gorrieri, J. Hall, A. Heise, R. Henderson, R. Hopkins, B. Keck, A. Kiehn, E. Kindler, M. Koutny, H.J. Kreowski, M. Kwiatkowska, M. Latteux, G. Mauri, A. Mazurkiewicz, M. Nielsen, L. Petrucci, M. Pinna, A. Poigné, L. Pomello, W. Reisig, G. Reggio, B. Rozoy, C. Simone, E. Smith, P. Starke, P. Taylor, W. Thomas, W. Vogler, K. Voss, D.N. Yankelevitch, W. Zuberek. The editor is also indebted to Mrs. M. Boon-van der Nat and Dr. A. Deutz for their help in the preparation of this volume.

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