

# Lecture Notes in Computer Science

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E. Odijk M. Rem  
J.-C. Syre (Eds.)

## PARLE '89 Parallel Architectures and Languages Europe

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Proceedings

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## PREFACE

Two years ago, Springer-Verlag published the Proceedings of the first PARLE Conference, as Lecture Notes in Computer Science (Vol. 258 and 259).

The initiative for these conferences was taken by project 415 of ESPRIT (the European Strategic Programme for Research and Development in Information Technology of the Commission of the European Communities).

The scope of the PARLE conferences covers central themes in the area of parallel architectures and languages, including such topics as concurrent, object-oriented, logic, and functional programming; MIMD, dataflow, inference and reduction machines; design and verification of parallel systems; VLSI, WSI and RISC architectures; performance evaluation, memory management, systolic arrays, applications and special purpose architectures.

PARLE '87, which attracted more than 300 participants, was considered a useful and successful forum, and encouraged the organisation of this second issue known as PARLE '89. More than 150 papers were submitted, from which 45 were selected by a Program Committee composed of the following experts, mostly from Europe:

P. Apers, the Netherlands	D. May, UK
J.W. de Bakker, the Netherlands	A. Mazurkiewicz, Poland
U. Baron, FRG	A.J. Nijman, USA
D. Bjoerner, Denmark	E.-R. Olderog, FRG
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A. Ciepielewski, Sweden	G. Rozenberg, the Netherlands
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C. Halatsis, Greece	M. Valero, Spain
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J. van Leeuwen, the Netherlands	D.H.D. Warren, UK
G. Levi, Italy	

In addition, the conference contains six invited lectures presenting the state of the art and advanced developments in major research areas related to the topics of the conference.

The programme of PARLE '89 furthermore comprises presentations on the subprojects which together constitute ESPRIT project 415. Parallel ar-

chitectures based on a variety of programming styles (object-oriented, logic, functional, dataflow) are represented in these overviews.

We wish to extend our sincere thanks to the members of the Program Committee for their invaluable contributions to the shaping of the PARLE '89 programme. We also express our gratitude to the PARLE '89 referees for their assistance in this process.

PARLE '89 has received substantial sponsorship from the ESPRIT programme, and from the companies which together form the consortium for ESPRIT project 415; AEG, West Germany: Nixdorf (Stollmann), West Germany: Bull, France: CSELT, Italy: GEC, UK: Philips, the Netherlands.

Philips Research Eindhoven was responsible for the local organization of PARLE '89. A special tribute is due to Frank Stoots and Fred Robert for their skillful, cheerful and meticulous handling of all organizational details. Technical support has also been provided by the Eindhoven University of Technology, in particular by Franka van Neerven. The European Computer-Industry Research Center (ECRC) of Munich has contributed to the organization and preparation of the technical programme. Special thanks are due to Astrid Maerkl, who took over the local administrative details on technical drafts, authors, and correspondence.

Thanks to the contributions of all the above listed persons and institutions, we have been able to collect in these two volumes a wealth of material on the theme of PARLE 89. The editors would be amply rewarded for their efforts if these results were to prove instrumental for the further advancement of European research on Parallel Architectures and Languages.

March 1989

E.A.M. Odijk  
M. Rem  
J.C. Syre

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