Peter Sloot Marian Bubak Bob Hertzberger (Eds.)

High-Performance Computing and Networking

International Conference and Exhibition Amsterdam, The Netherlands, April 1998 Proceedings





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High-Performance Computing and Networking



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Preface

The international HPCN Europe event originates from several initiatives in Europe, the United States of America, and Japan. The first HPCN Europe conference was organised in 1993 in Amsterdam. Since 1994, the foundation HPCN Europe and Royal Dutch Jaarbeurs have organised the HPCN Europe Conference and Exhibition as a travelling event throughout Europe. As of 1998, HPCN Europe will be held every year at the Amsterdam RAI conference centre, joining the Internet Working Event Exhibition of the RAI.

This year, the HPCN Europe event has undergone a complete facelift. HPCN Europe 98 provides five parallel tracks. The intention to further increase the focus of the event has resulted in two tracks with workshops presenting invited papers only and two other tracks presenting the submitted papers. In addition, one track will present the new emerging HPCN application field of Telemedicine.

The aim to concentrate even more than before on emerging (end-user) applications has resulted in two workshops and one mini conference on that topic. The Genome Computing workshop and the Modelling & Simulation of Complex Industrial Systems workshop will illustrate the important issues in those fields, whereas the first International Conference on Telemedical Information Society will discuss the state of the art in this emerging field. Enabling HPCN technology such as Virtual Reality and WEB will be given much attention during HPCN Europe 98. This is illustrated by a separate Virtual Reality workshop. That the more classical HPCN fields haven't been forgotten is illustrated by two workshops: "Eurotools" on tools and "HPF+" on languages. The papers of the last workshop are also included in these proceedings.

The conference proceedings include all the accepted papers and posters from all four conference tracks. More than 150 papers and 70 posters were received. The organisers are grateful for the hard work of the programme committee in selecting around 80 papers and 50 posters in the short time frame that was available. The organisers in particular would like to thank the conference chair P.M.A. Sloot as well as the chairs and co-chairs of the programme committee, M.A. Barak, A.V. Bogdanov, M. Bubak, G. Lonsdale, and R. Williams, under whose responsibility the final paper selection took place and who assembled this year's programme.

These proceedings reflect the results of all this work, whereas a collection of the best papers will later be selected for publication in FGCS of North-Holland. The organisers were pleased to observe the high quality of the submitted contributions.

This event would not have been possible without the broad and personal support and the invaluable suggestions and contributions of the members of the programme committee, and the advisory board. The face and focus of the HPCN Europe event was realised by the HPCN Europe 1998 organising committee.

The organisation would like to express its gratitude to the programme and conference secretariats, Laura Lotty, Maarten Prins, Lodewijk Bos, and Emmy van Rijen. They would like to thank the computer support group of the WINS Faculty of the University of Amsterdam as well as SARA, in particular Ger Poletiek and Jaap Hollenberg for all the support in electronic communication. The organisers acknowledge the help of the Dutch HPCN foundation, the UvA, and the RAI for supporting the event.

February 1998

Bob Hertzberger On behalf of the organising committee

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