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# Lecture Notes in Computer Science

Edited by G. Goos and J. Hartmanis

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P. Martin-Löf G. Mints (Eds.)

**COLOG-88**

International Conference on Computer Logic  
Tallinn, USSR, December 12–16, 1988  
Proceedings

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## PREFACE

This volume contains papers presented at COLOG-88, the Conference on Computer Logic held December 12-16, 1988 in Tallinn, Estonia. The aim of the conference, the first of its kind in the Soviet Union, was to establish scientific cooperation in the field of computer logic. There were invited lectures (1 hour including discussion) and poster sessions. Papers were invited in the following fields: applications of deductive systems, deductive program synthesis and analysis, theorem proving, computer experiments in logic-related fields and logic programming.

The following people delivered invited lectures: J. Barzdin (Riga), N. G. de Bruijn (Eindhoven), R. Burstall (Edinburgh), T. Coquand (Rocquencourt), J.-Y. Girard (Paris), V. Lifschitz (Stanford), P. Lorents (Tallinn), P. Martin-Löf (Stockholm), G. Mints (Tallinn), B. Nordström (Göteborg), J. Smith (Göteborg), L. Paulson (Cambridge), D. Sviridenko (Novosibirsk), M. Taitslin (Kalinin).

The Program Committee included Ju. Ershov, J.-Y. Girard, S. Lavrov, P. Lorents, P. Martin-Löf (Chairman), J. McCarthy, G. Mints, D. Pospelov, G. Pospelov (Honorary Chairman), A. Salomaa, J. Shepherson, E. Tyugu.

Texts of 55 submitted papers were collected by P. Lorents, G. Mints and E. Tyugu in two rotaprinted volumes distributed to the participants. The present volume consists mainly of submitted papers selected by the editors but edited by the authors themselves. Invited papers by J.-Y. Girard and G. Mints to be published elsewhere have been replaced by other contributions by the same authors.

We would like to thank the Institute of Cybernetics of the Estonian Academy of Sciences, the Estonian Academy of Sciences and the Scientific Council "Artificial Intelligence" of the Soviet Academy of Sciences, which sponsored the Conference. Next we thank the members of the Organizing Committee, B. Tamm, P. Lorents, L. Keskküla, K. Kanter, A. Kruptšitskaja, T. Timmermann, A. Habicht, I. Kiiver, V. Leini, I. Maasik, K. Sau, T. Klementi, M. Püüa, T. Tammet, O.-M. Tammepuu, who carefully handled the local arrangements for the meeting. An especially large part of the work was done by L. Keskküla, who also typed first versions of some papers. J. Maasik did most of the technical work for this volume, including the preparation of camera ready copies of most of the papers by the authors from the USSR.

Last but not least we would like to thank J. Smith, who assembled the volume and put it into its final form.

Per Martin Löf    Grigori Mints

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