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Formal Methods in Programming and Their Applications

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Preface

The volume comprises the papers selected for presentation at the international conference "Formal Methods in Programming and Their Applications", held in Academgorodok (Novosibirsk, Russia), June 28 - July 2, 1993.

The conference was organized by the Institute of Informatics Systems of the Siberian Division of the Russian Academy of Sciences. The Institute is engaged in active research in the field of theoretical programming. The Institute has been an organizer of several international conferences related to programming and formal methods in programming but the latter have been considered together with other problems of programming. The current conference is the first forum organized by the Institute which is entirely dedicated to formal methods.

The main scientific tracks of the conference have been centered around the formal methods of program development and program construction. They include:

- specification, synthesis, transformation and verification of programs;
- parallel and distributed computations;
- semantics and logic of programs;
- theory of compilation and optimization;
- --- mixed computation, partial evaluation and abstract interpretation.

One of the main goals of the conference has been to promote formal methods in programming and to present and discuss the most interesting approaches to practical programming. A number of papers delivered at the conference are aimed at such a goal.

Scientists from eleven countries have been participants to the conference (Austria, Brazil, Canada, Denmark, England, France, Germany, the Netherlands, Russia, Turkey, and the USA as well as from the Territory of Macau)!

Also in the opinion of the participants the conference has been a success and similar conferences should be held in the future, perhaps, with a greater focus on the application of formal methods and the problems connected with it.

The organizers of the conference express their deep gratitude to the colleagues of Russian and international communities who supported actively the conference by rendering assistance and advice, review and participation.

We would also like to thank the Springer-Verlag for excellent co-operation.

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