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Preface

The *Sixth Workshop on Distributed Algorithms* (WDAG 92) took place on November 2-4, 1992 in Haifa, Israel. WDAG is intended to provide a forum for researchers and other parties interested in distributed algorithms and their applications. The aim is to present recent research results, explore directions for future research, and identify common fundamental techniques that serve as building blocks in many distributed algorithms. WDAG 92 follows five successful workshops in Ottawa (1985, proceedings published by Carleton University Press), Amsterdam (1987, see Lecture Notes in Computer Science (LNCS) 312), Nice (1989, LNCS 392), Bari (1990, LNCS 484) and Delphi (1991, LNCS 579).

Papers were solicited describing original results in all areas of distributed algorithms and their applications, including distributed graph algorithms, distributed combinatorial algorithms, design of network protocols, routing and flow control, communication complexity, fault-tolerant distributed algorithms, distributed data structures, distributed database techniques, replica control protocols, distributed optimization algorithms, mechanisms for safety and security in distributed systems, and protocols for real-time distributed systems.

The 24 papers were selected by the Program Committee from 38 submitted papers. The selection was based on perceived originality and quality. The selection process was carried out via email, using a scoring analysis program (courtesy of Robert Schapire, of AT&T). It is expected that the authors will prepare extended versions of the papers appearing in this proceedings, to be submitted for refereed publication in one of the scientific journals. The Program Committee wishes to thank all who submitted papers for consideration.

The Program Committee consisted of

L. Bougé (ENS Lyon)	A. Segall (*co-chair*, Technion)
D. Dolev (Hebrew U. and IBM Almaden)	P. Spirakis (CTI and Patras U.)
S. Kutten (IBM)	G. Tel (Utrecht U.)
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N. Santoro (Carleton U.)	J. Welch (U. of North Carolina)
A. Schiper (EPF Lausanne)	S. Zaks (*co-chair*, Technion).

We wish to express our gratitude to all members of the Program Committee for their cooperation and to the referees who assisted them (see appendix for list).

We wish to thank the Department of Computer Science, Technion for placing at our disposal the best professional assistance it can offer. Judith Tamari did an excellent job in organizing the conference and putting the proceedings together, and Aythan Avior - in handling the computer work and adapting the scoring analysis program to WDAG needs. Our deepest thanks go to them both. We would also like to thank David Cohen of the *S. Neaman Institute* for his experienced help and advice.

The *S. Neaman Institute* selected WDAG 92 as the first workshop to receive sponsorship under the newly-established program to support scientific meetings related to research carried out at the Technion. On behalf of all Workshop participants and the entire Distributed Algorithms scientific community, the Workshop Steering Committee and Co-Chairmen would like to express their deep appreciation to the *S. Neaman Institute* for this support.

Haifa, November 1992

Adrian Segall
Shmuel Zaks

The S. Neaman Institute for Advanced Studies in Science and Technology

The Samuel Neaman Institute for Advanced Studies in Science and Technology is an independent public-policy research institute, established in 1978 to assist in the search for solutions to national problems in science and technology, education, economy and industry, and social development. As an interdisciplinary think-tank, the institute draws on the faculty and staff of Technion, other institutions and scientists in Israel, and specialists abroad. The Institute serves as a bridge between academia and decision makers through research, workshops and publications.

The Institute pursues a policy of inquiry and analysis designed to identify significant public policy problems, to determine possible courses of action to deal with the problems, and to evaluate the consequences of the identified courses of action.

As an independent not-for-profit research organization, the Institute does not advocate any specific policy or embrace any particular social philosophy. As befits a democratic society, the choices among policy alternatives are the prerogative and responsibility of the elected representatives of the citizenry. The Samuel Neaman Institute endeavors to contribute to a climate of informed choice.

The Institute undertakes sponsored advanced research, formulates invitational workshops, implements continuing education activities on topics of significance for the development of the State of Israel, and maintains a publications program for the dissemination of research and workshop findings. Specific topics for research may be initiated by the Institute, researchers, government agencies, foundations, industry or other concerned institutions. Each research program undertaken by the Institute is designed to be a significant scholarly study worthy of publication and public attention.

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