CONTRIBUTORS

Air Company, Ltd., Japan Bell Northern Research Ltd., Canada CWI, Netherlands Centre for Systems Sciences, Simon Fraser University, Canada City Polytechnic of Hong Kong, Hong Kong Fern University of Hagen, Germany GMD. Germany Hua Hsing Information Corporation, Taiwan, China IBM Brasil-Lasri, Brazil **IEI-CNR**, Italy INESC, Portugal National University of Singapore, Singapore Norwegian Technical University, Norway Osaka University, Japan Research Centre of Crete, Greece Simon Fraser University, Canada The People's University of China, China University of Alberta, Canada University of Dublin, Ireland Université de Geneve, Switzerland Université de Louvain, Belgium University of Stockholm, Sweden University of Toronto, Canada University of Queensland, Australia Universitat Politècnica de Catalunya, Spain

ADDITIONAL COPIES

Additional copies of this proceedings may be obtained from:

For United Kingdom & European

Morgan Kaufmann – UK 27 Palmeira Mansions Church Road, Hove East Sussex BN3 2FA U.K. For U.S.A. & All Other Regions: Morgan Kaufmann Publishers, Inc. 2929 Campus Drive, Suite 260 San Mateo, California 94403 U.S.A.

ISBN 1-55860-151-1 ISSN 00730-9317 Copyright ©1992

Permission to copy without fee all or part of this material is granted privided that the copies are not made or distributed for direct commercial advantage, the VLDB copyright notice and the title of the publication and its date appear, and notice is given that copying is by permission of the Vary Large Data Base Endowment. To copy otherwise, or to republish, requires a fee and/or special permission from the Endowment.