

CONTENTS

FOREWORD	v
INTRODUCTION	ix
DATABASE SCHEMA DESIGN: CYCLES AND DECOMPOSITION	
<i>Towards Designing Acyclic Database Schemes,</i> J. Biskup and H. H. Brüggemann	3
<i>Minimal Coverings of Acyclic Database Schemata,</i> G. Ausiello, A. D'Atri, and M. Moscarini	27
<i>Eliminating Cycles in Database Schemas,</i> Y. Hanatani	53
<i>A Decomposition Method for Cyclic Databases,</i> M. Gyssens and J. Paredaens	85
<i>Horizontal Decomposition for Handling Exceptions to Functional Dependencies,</i> P. De Bra and J. Paredaens	123
INTEGRITY CONSTRAINTS	
<i>Compiling Constraint-Checking Programs from First-Order Formulas,</i> L. J. Henschen, W. W. McCune, and S. A. Naqvi	145
<i>Applications of Finite Differencing to Database Integrity Control and Query/Transaction-Optimization,</i> R. Paige	171
<i>A Family of Temporal Languages for the Description of Transition Constraints,</i> M. A. Casanova and A. L. Furtado	211

INCOMPLETE INFORMATION

Nonmonotonic Reasoning and Databases, 239
G. Bossu and P. Siegel

On Algebraic Query Processing in Logical Databases, 285
T. Imielinski

ABSTRACT DATA TYPES FOR FORMAL SPECIFICATIONS AND VIEWS

Stepwise Construction of Algebraic Specifications, 321
P. A. S. Veloso and A. L. Furtado

Properties of Views and Their Implementation, 353
P. Paolini and R. Zicari

QUERY LANGUAGE THEORY

On the Undecidability of Equivalence Problems for 393
Relational Expressions,
T. Imielinski and W. Lipski, Jr.

NAME INDEX 411

SUBJECT INDEX 415

LIST OF REFEREES 425

ADDRESSES OF CONTRIBUTING AUTHORS 427

