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Editor of the Volume

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PREFACE

The XXXVIII Semester on Algebraic Methods in Logic and their Computer Science Applications, organized by the Stefan Banach International Mathematical Center, was held in Warsaw between September 15 and December 15, 1991.

It was divided into four sections covering the following topics: *Universal Algebra* (November 1–December 15), *Algebraic Logic* (September 15–October 30), *Algebra and Logic in Computer Science* (September 15–December 15) and *Applications in Physics and in the Theory of Cellular Automata* (November 1–December 15). The organizing committee consisted of H. Andréka and I. Németi (both Sec. II), C. Rauszer (Sec. III) and the chairman of the committee, M. Mączyński (Secs. I & IV).

During these three months 118 invited speakers from 25 countries gave around 200 hours of talks. This resulted in a large number of high quality papers being presented to the proceedings of the Semester, which are traditionally published in the Banach Center Publications series. The papers were carefully evaluated, although it was clear that their sheer number was too large for them to be published in a single volume only. Moreover, considering the rich variety of material presented during the Semester, I have decided that a complementary two-volume compilation of the proceedings is more appropriate.

The present volume contains papers from all four sections, although the majority of papers from Section III (Algebra and Logic in Computer Science) have already appeared in a special issue of Fundamenta Informaticae. Let me take this opportunity to express my gratitude to all the participants for their interest in the Semester, to the authors of all the submitted papers for their valuable contribution, and to all the referees of both volumes. Very special thanks are due to Hajnal Andréka and István Németi for their invaluable work during the Semester and for their help in the preparation of the proceedings.

Warszawa, February 1993

Cecylia Rauszer

CONTENTS

Preface	5
C. Brink, From two- to four-valued logic	9 - 16
J. M. Font, On the Leibniz congruences	17 - 36
J. O. M. Jaspars, Normal forms in partial modal logic	37 - 50
D. Pigozzi and A. Salibra, Polyadic algebras over nonclassical logics	51 - 66
A. Salibra and G. Scollo, Compactness and Löwenheim–Skolem properties in cat-	
egories of pre-institutions	67 - 94
A. Simon, What the finitization problem is not	95 - 116
S. D. COMER, On connections between information systems, rough sets and algebraic	
logic	117 - 124
I. Korec, Generalized Pascal triangles: overview of new results	125 - 134
Z. PAWLAK and A. SKOWRON, Rough membership functions: a tool for reasoning with	
uncertainty	135 - 150
D. Skordev, On the detection of some periodic loops during the execution of Prolog	
programs	151 - 166
R. Berghammer and G. Schmidt, Relational specifications	167 - 190
D. A. Bredikhin, On algebras of relations	191-199
R. D. Maddux, Finitary axiomatizations of the true relational equations	201 - 208
S. MIKULÁS, Strong completeness of the Lambek Calculus with respect to Relational	
Semantics	209 - 217
W. J. Blok and I. M. A. Ferreirim, Hoops and their implicational reducts (abstract)	219 - 230
I. DÜNTSCH, A note on cylindric lattices	231 - 238
P. Jipsen, Discriminator varieties of Boolean algebras with residuated operators	239 - 252
J. D. Monk, Lectures on cylindric set algebras	253 - 290
H. A. Priestley, Natural dualities for varieties of distributive lattices with a quantifier	291 - 310
I. Sain, Weak products of universal algebras	311 - 318
J. Smith, Comtrans algebras and their physical applications	319 - 326
R. J. Thompson, Complete description of substitutions in cylindric algebras and other	
algebraic logics	327-342