

CONTENTS

Preface	ix
Models of Horn theories MICHAEL BARR	1
Geometric invariance of existential fixed-point logic ANDREAS BLASS	9
On the decidability of objects in a locos J. R. B. COCKETT	23
The Dialectica categories V. C. V. de PAIVA	47
Combinators PETER FREYD	63
POLYNAT in PER PETER FREYD	67
Towards a geometry of interaction. JEAN-YVES GIRARD	69
The category of sketches as a model for algebraic semantics JOHN W. GRAY	109
The theory of constructions: Categorical semantics and topos-theoretic models J. MARTIN E. HYLAND and ANDREW M. PITTS	137
A simple model of the theory of constructions FRANÇOIS LAMARCHE	201
Multicategories revisited J. LAMBEK	217
An application of minimal context-free intersection partitions to rewrite rule consistency checking DANA MAY LATCH	241

Qualitative distinctions between some toposes of generalized graphs F. WILLIAM LAWVERE	261
Typed lambda models and cartesian closed categories JOHN C. MITCHELL and PHILIP J. SCOTT	301
Some connections between models of computation PHILIP S. MULRY	317
Some applications of categorical model theory ROBERT PARE	325
Coherence for bicategories with finite Bilimits I A. J. POWER	341
On partial Cartesian closed categories LEOPOLDO ROMÁN	349
Normalization revisited ANDRE SCEDROV	357
Linear logic, *-autonomous categories and cofree coalgebras R. A. G. SEELY	371