

Contents

Introduction	vii
Mihály Makkai: A Biographical Note, with Reminiscences <i>Thomas G. Kucera</i>	ix
The Number of Countable Models in Categories of Sheaves <i>Nathanael Leedom Ackerman</i>	1
Pseudomonadicity and 2-Stack Completions <i>Marta Bunge and Claudio Hermida</i>	29
Purity and Pure-Injectivity for Topological Modules <i>Clint Enns and Thomas G. Kucera</i>	55
Model Theory vs. Categorical Logic: Two Approaches to Pretopos Completion (a.k.a. T^{eq}) <i>Victor Harnik</i>	79
The Dialectica Monad and Its Cousins <i>Pieter J. W. Hofstra</i>	107
A Categorical Approach to Internality <i>Moshe Kamensky</i>	139
Computable Structures of Scott Rank ω_1^{CK} <i>Julia F. Knight</i>	157
The Lorentz Category in Special Relativity <i>Joachim Lambek</i>	169
A Model-Theoretic Counterpart to Moishezon Morphisms <i>Rahim Moosa</i>	177
Generic Stability, Regularity, and Quasiminimality <i>Anand Pillay and Predrag Tanović</i>	189
Indexed Lawvere Theories for Local State <i>John Power</i>	213
Model Theory in Additive Categories <i>Mike Prest</i>	231
A Derivation of Einstein's Vacuum Field Equations <i>Gonzalo E. Reyes</i>	245

An Adventure into Hungarian Word Order with Cyclic Pregroups <i>Mehrnoosh Sadrzadeh</i>	263
No Limit Model in Inaccessibles <i>Saharon Shelah</i>	277
The Strict ω -Groupoid Interpretation of Type Theory <i>Michael A. Warren</i>	291
Lax Monoidal Fibrations <i>Marek Zawadowski</i>	341