Contents

Preface	ix
Speakers	xi
Participants	xiii
Conference photo	xvi
A brief introduction to the work of J. Peter May, on the occasion of his 60th birthday IGOR KRIZ	xix
Mathematical ancestry of J. Peter May	xliii
On the Adams E_2 -term for elliptic cohomology ANDREW BAKER	1
Mapping class groups and function spaces CF. BÖDIGHEIMER, F. R. COHEN, AND M. D. PEIM	17
Extended powers of manifolds and the Adams spectral sequence ROBERT R. BRUNER	41
Centers and Coxeter elements W. G. Dwyer and C. W. Wilkerson	53
On the homotopy type of the loops on a 2-cell complex Brayton Gray	77
Rational $SO(3)$ -equivariant cohomology theories J. P. C. Greenlees	99
On the K -theory of nilpotent endomorphisms Lars Hesselholt and IB Madsen	127
The Ext^0 -term of the real-oriented Adams-Novikov spectral sequence Po Hu	141
Toral groups and classifying spaces of p -compact groups Kenshi Ishiguro	155
Stable splittings and the diagonal NICHOLAS J. KUHN	169

viii CONTENTS

Dual calculus for functors to spectra RANDY MCCARTHY	183
The triple loop space approach to the telescope conjecture MARK MAHOWALD, DOUGLAS RAVENEL, AND PAUL SHICK	217
Flatness for the E_{∞} tensor product Michael A. Mandell	285
On the Connes-Kreimer construction of Hopf algebras I. Moerdijk	311