## CONTENTS

## I. Expository Articles

Sérgio R. Fenley — Asymptotic geometry of foliations and pseudo-Anosov flows — a survey	1
Kiyoshi Igusa — Pontrjagin classes and higher torsion of sphere bundles	21
Teruaki Kitano and Takayuki Morifuji — $L^2$ -torsion invariants and the Magnus representation of the mapping class group	31
Hông-Vân Lê and Kaoru Ono — Parameterized Gromov-Witten invariants and topology of symplectomorphism groups	51
Robert C. Penner — Mapping class actions on surface group completions	77
Takuya Sakasai — Johnson's homomorphisms and the rational cohomology of subgroups of the mapping class group	93
II. Research Articles	
Toshiyuki Akita — On mod $p$ Riemann-Roch formulae for mapping class groups	111
Joan S. Birman, Tara E. Brendle and Nathan Broaddus — Calculating the image of the second Johnson-Morita representation	119
Joan S. Birman, Dennis Johnson and Andrew Putman — Symplectic Heegaard splittings and linked abelian groups	135
Dmitri Burago, Sergei Ivanov and Leonid Polterovich — Conjugation-invariant norms on groups of geometric origin	221
Hisaaki Endo — A generalization of Chakiris' fibrations	251
Koji Fujiwara — Subgroups generated by two pseudo-Anosov elements in a mapping class group. I. Uniform exponential growth	283
Kiyonori Gomi — Differential characters and the Steenrod squares	297
Richard HAIN — Relative weight filtrations on completions of mapping class groups	309
Yasushi Kasahara — Remarks on the faithfulness of the Jones representations	369