

Contents

1	Gottlieb Groups of Spheres	1
1.1	Preliminaries on Gottlieb Groups	1
1.2	Gottlieb Groups of Spheres with Stems for $k \leq 7$	10
1.3	Proof of Theorem 1.14, Part I	16
1.4	Proof of Theorem 1.14, Part II	24
1.5	Proof of $[\iota_{16s+7}, \sigma_{16s+7}] \neq 0$ for $s \geq 1$	35
1.6	Gottlieb Groups of Spheres with Stems for $8 \leq k \leq 13$	38
2	Gottlieb and Whitehead Center Groups of Projective Spaces	49
2.1	Preliminaries I	49
2.2	Preliminaries II	56
2.3	Whitehead Center Groups of Projective Spaces	61
2.4	Some Whitehead Center Groups of Real Projective Spaces	64
2.5	Some Whitehead Center Groups of Complex and Quaternionic Projective Spaces	73
2.6	Gottlieb Groups of Real Projective Spaces	81
2.7	Gottlieb Groups of Complex and Quaternionic Projective Spaces	89
2.8	The Case of the Cayley Projective Plane	98
3	Gottlieb and Whitehead Center Groups of Moore Spaces	105
3.1	Gottlieb and Whitehead Center Groups of Mod 2 Moore Spaces	105
3.2	Gottlieb Groups of Some Moore Spaces $M(A, n)$	110
	References	127
	Index	131

Gottlieb and Whitehead Center Groups of Spheres,
Projective and Moore Spaces

Golasinski, M.; Mukai, J.

2014, XVII, 132 p. 7 illus., Hardcover

ISBN: 978-3-319-11516-0