

## Contents

Preface . . . . .	VII
-------------------	-----

### Part I: Representation Forms and Homotopy Representations

by Tammo tom Dieck

1. Representation forms and homotopy representations . . . . .	1
2. Homotopy representations with free action . . . . .	9
3. Tangential structures on Swan complexes . . . . .	18
4. The Picard group of the Burnside ring . . . . .	25
5. Cyclic groups . . . . .	31
6. Dihedral groups . . . . .	37
7. Actions on Brieskorn varieties . . . . .	45
8. Resolution of linking forms . . . . .	54
9. Surgery and linking forms . . . . .	58
10. Stably linear homotopy representations . . . . .	64
11. Linking of fixed point sets in representation forms . . . . .	72
References . . . . .	77

### Part II: An Introduction to Calculations in Surgery

by Ian Hambleton

Lecture 1. . . . .	81
Lecture 2. . . . .	86
Lecture 3. . . . .	92
Lecture 4. . . . .	102
Lecture 5. . . . .	109