

Contents

Abstract	i
Acknowledgments	ii
Postscript-1998	iii
Contents	iv
0 INTRODUCTION	1
1 NASH CONSTRUCTION	3
0 Introduction	3
1 Coherent Sheaves	3
2 Monoidal Transformations	6
3 The Nash Construction	7
4 Examples	14
5 Serre's Extension Problem	22
2 GRASSMANN GRAPH CONSTRUCTION	25
0 Introduction	25
1 Bialynicki-Birula decomposition	25
2 \mathbb{C}^* -action on $G(k, n)$	26
3 Examples	30
4 \mathbb{C}^* -actions on Grassmann bundles	32
5 Graphs of complexes	35
6 Examples	37
3 SINGULAR HOLOMORPHIC FOLIATIONS	43
0 Introduction	43
1 Preliminaries	43
2 Baum-Bott Residues	45
3 Suwa's Work	48
4 Nash Residue and Reduction	50
4 OBSTRUCTION CLASSES	63
0 Introduction	63
1 Obstruction Classes	63
2 Future Research Projects	68
REFERENCES	70
Figure 1	31
Figure 2	31