

Table of Contents

Preface	iii
Introduction	1
1. Jordan algebras of symmetric bilinear forms	2
2. Cayley algebras	7
3. Exceptional Jordan algebras	16
4. Automorphisms of \mathcal{D}_4 's	25
5. Exceptional Lie algebras of type D_4	30
6. Roots of F_4 and E_6	34
7. Lie algebras of type E_6	37
8. Some applications of Galois cohomology	57
9. Lie algebras of type E_7	68
10. Tits' second construction	89
11. Calculation of the Killing forms	104
12. Models of the real forms	118
Bibliography	122