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Nota di contenuto	""Contents""; ""Chapter 1. Introduction""; ""Chapter 2. Roots and Coxeter Groups""; ""2.1. Split tori over F ""; ""2.2. Roots, coroots and the Langlands' dual""; ""2.3. Coxeter groups""; ""Chapter 3. The First Three Algebra Problems and the Parameter Spaces $a_{??}$ for $K \backslash G/K$ ""; ""3.1. The generalized eigenvalues of a sum problem Q_1 and the parameter space $a_{??}$ of k -double cosets""; ""3.2. The generalized singular values of a product and the parameter space $a_{??}$ of K -double cosets""; ""3.3. The generalized invariant factor problem and the parameter space $a_{??}$ of K -double cosets"" ""3.4. Comparison of the parameter spaces for the four algebra problems""""3.5. Linear algebra problems""; ""Chapter 4. The existence of polygonal linkages and solutions to the algebra problems""; ""4.1. Setting up the general geometry problem""; ""4.2. Geometries modeled on Coxeter complexes""; ""4.3. Bruhat-Tits buildings associated with

nonarchimedean reductive Lie groups""; ""4.4. Geodesic polygons"";
 ""Chapter 5. Weighted Configurations, Stability and the Relation to
 Polygons""; ""5.1. Gauss maps and associated dynamical systems"";
 ""5.2. The polyhedron $D_{\text{sub}(n)}(X)$ ""
 ""5.3. The polyhedron for the root system $B_{\text{sub}(2)}$ ""Chapter 6.
 Polygons in Euclidean Buildings and the Generalized Invariant Factor
 Problem""; ""6.1. Folding polygons into apartments""; ""6.2. A Solution
 of Problem Q2 is not necessarily a solution of Problem Q3""; ""Chapter
 7. The Existence of Fixed Vertices in Buildings and Computation of the
 Saturation Factors for Reductive Groups""; ""7.1. The saturation factors
 associated to a root system""; ""7.2. The existence of fixed vertices"";
 ""7.3. Saturation factors for reductive groups""; ""Chapter 8. The
 Comparison of Problems Q3 and Q4""
 ""8.1. The Hecke ring""8.2. A geometric interpretation of $m_{\text{sub}(I^{\pm}, I^2, I^3)}(0)$ ""; ""8.3. The Satake transform""; ""8.4. A solution of Problem Q4
 is a solution of Problem Q3""; ""8.5. A Solution of Problem Q3 is not
 necessarily a solution of Problem Q4""; ""8.6. The saturation theorem
 for $GL(I)$ ""; ""8.7. Computations for the root systems $B_{\text{sub}(2)}$ and $G_{\text{sub}(2)}$ ""; ""Appendix A. Decomposition of Tensor Products and
 Mumford Quotients of Products of Coadjoint orbits""; ""A. 1. The
 existence of semistable triples and nonzero invariant vectors in triple
 tensor products""
 ""A. 2. The semigroups of solutions to Problems Q1 and Q4""
 Bibliography""
