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Nota di contenuto	Frontmatter -- Contents -- §1. Introduction -- §2. Algebraic Preliminaries -- §3. The Geometry of : Preliminaries -- §4. A Metric Definition of the Maximal Boundary -- §5. Polar Parts -- §6. A Basic Inequality -- §7. Geometry of Neighboring Flats -- §8. Density Properties of Discrete Subgroups -- §8. Density Properties of Discrete Subgroups -- § 10. Pseudo Isometries of Simply Connected Spaces with Negative Curvature -- §11. Polar Regular Elements in Co-Compact -- § 12. Pseudo-Isometric Invariance of Semi-Simple and Unipotent Elements -- §13. The Basic Approximation -- §14. The Map -- §15. The Boundary Map 0 -- §16. Tits Geometries -- §17. Rigidity for R-rank > 1 -- §18. The Restriction to Simple Groups -- §19. Spaces of R-rank 1 -- §20. The Boundary Semi-Metric -- §21. Quasi-Conformal Mappings Over K and Absolute Continuity on Almost All R-Circles -- §22. The Effect of Ergodicity -- §23. R-Rank 1 Rigidity Proof Concluded -- §24. Concluding Remarks -- Bibliography -- Backmatter
Sommario/riassunto	Locally symmetric spaces are generalizations of spaces of constant curvature. In this book the author presents the proof of a remarkable phenomenon, which he calls "strong rigidity": this is a stronger form of the deformation rigidity that has been investigated by Selberg, Calabi-

Vesentini, Weil, Borel, and Raghunathan. The proof combines the theory of semi-simple Lie groups, discrete subgroups, the geometry of E. Cartan's symmetric Riemannian spaces, elements of ergodic theory, and the fundamental theorem of projective geometry as applied to Tits geometries. In his proof the author introduces two new notions having independent interest: one is "pseudo-isometries"; the other is a notion of a quasi-conformal mapping over the division algebra  $K$  ( $K$  equals real, complex, quaternion, or Cayley numbers). The author attempts to make the account accessible to readers with diverse backgrounds, and the book contains capsule descriptions of the various theories that enter the proof.

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