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Nota di contenuto	1 Introduction -- 2 Method of proof -- Part I Generalities -- 3 Reminders: spectral analysis on spherical homogeneous spaces -- 4 Discrete spectrum of type I and II -- 5 Dierential operators coming from and from the fiber -- Part II Proof of the theorems of Chapter 1 -- 6 Essential self-adjointness of the Laplacian -- 7 Transfer of Riemannian eigenfunctions and spectral decomposition -- 8 Consequences of conditions (A) and (B) on representations of G and -- 9 The maps i, and p, preserve type I and type II -- 10 Infinite discrete spectrum of type II -- Part III Representation-theoretic description of the discrete spectrum -- 11 A conjectural picture -- 12 The discrete spectrum in terms of group representations.
Sommario/riassunto	A groundbreaking theory has emerged for spectral analysis of pseudo-Riemannian locally symmetric spaces, extending beyond the traditional Riemannian framework. The theory introduces innovative approaches to

global analysis of locally symmetric spaces endowed with an indefinite metric. Breakthrough methods in this area are introduced through the development of the branching theory of infinite-dimensional representations of reductive groups, which is based on geometries with spherical hidden symmetries. The book elucidates the foundational principles of the new theory, incorporating previously inaccessible material in the literature. The book covers three major topics. (1) (Theory of Transferring Spectra) It presents a novel theory on transferring spectra along the natural fiber bundle structure of pseudo-Riemannian locally homogeneous spaces over Riemannian locally symmetric spaces. (2) (Spectral Theory) It explores spectral theory for pseudo-Riemannian locally symmetric spaces, including the proof of the essential self-adjointness of the pseudo-Riemannian Laplacian, spectral decomposition of compactly supported smooth functions, and the Plancherel-type formula. (3) (Analysis of the Pseudo-Riemannian Laplacian) It establishes the abundance of real analytic joint eigenfunctions and the existence of an infinite L2 spectrum under certain additional conditions.