Let $M$ be a geometrically finite rank one locally symmetric manifold. The aim of this paper is to prove that the spectrum of the Laplace operator on $M$ is finite in a small interval which is optimal. This paper is organized as follows: Section 1 is an introduction to the subject. Section 2 deals with estimates for the spectrum on Riemannian manifolds. Section 3 concerns finiteness of the spectrum. Section 4 deals with rank one locally symmetric manifolds. The author studies the spectrum on cusps and complement of convex sets in this section, which will be used in Section 5 to obtain global results. Section 5 is devoted to geometrically finite manifolds. The author returns to the study of the spectrum of the whole manifold. He gives a topological decomposition of geometrically finite manifolds. Section 6 deals with non-maximal rank as stated in the previous section, and the proof is given without the assumption that the manifold $M$ has only maximal rank cusps.

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