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## The spectrum and the number of ends on complete Riemannian manifolds

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**Abstract:** In this talk we will describe a general method of counting the number of ends for some classes of complete Riemannian manifolds. A typical class of manifolds being considered is that the greatest lower bound of the spectrum is of maximum value relative to a lower bound of the Ricci curvature. Another class are locally symmetric spaces of infinite volume and has its spectrum bounded by the maximum value. Finally, we will also address manifolds with finite volume.