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Continuity of eigenvalues with applications to eigenvalue optimization

In this talk we discuss a general framework of eigenvalues associated to Radon measures on Riemannian manifolds. This setup unifies a variety of classical eigenvalue problems, including Laplacian and Steklov problems. A simple condition on a sequence of measures μ_n that guarantees the continuity of corresponding eigenvalues is provided. We give applications to eigenvalue optimization problems. The talk is based on a joint work with J. Lagacé and A. Girouard.