Inverse boundary spectral problem for Riemannian polyhedra

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Abstract

We consider an admissible Riemannian polyhedron with piece-wise smooth boundary. The associated Laplacian defines the boundary spectral data as the set of eigenvalues and restrictions to the boundary of the corresponding eigenfunctions. We prove that the boundary spectral data prescribed on an open subset of the polyhedron boundary determine the admissible Riemannian polyhedron uniquely. This is a joint work with Professor Kurylev.