

# Inverse boundary spectral problem for a Riemannian polyhedron

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## Abstract

We consider an  $n$ -dimensional admissible Riemannian polyhedron and introduce a Laplace-Beltrami operator on it. We define a set of Boundary Spectral Data and formulate the inverse boundary spectral problem. By imposing the proper interface conditions we get the uniqueness of solution of the direct problem. We use the Gaussian beams technique to complete the interface reconstruction procedure. Finally we present the sketch of the proof.