Inverse spectral theory for Laplacians on rotationally symmetric manifolds.

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Abstract:

We solve the inverse problem for Laplacians on rotationally symmetric manifolds. We consider two cases:

 1) the manifold is a cylindrical type.

 2) the manifold is a perturbed torus.

The proof of our main results is based on non-linear functional analysis (the so-called analytic approach).
It is a joint work with Hiroshi Isozaki.