ALEXANDRE GIROUARD, Université Laval

Steklov eigenvalues of submanifolds with prescribed boundary in Euclidean space

We obtain upper and lower bounds for Steklov eigenvalues of submanifolds with prescribed boundary in Euclidean space. A general upper bound is proved, which depends only on the geometry of the fixed boundary and on the measure of the interior. Sharp lower bounds are given for hypersurfaces of revolution with connected boundary: we prove that each eigenvalue is uniquely minimized by the ball. We also observe that each surface of revolution with connected boundary is isospectral to the disk. This is joint work with Bruno Colbois and Katie Gittins.