

A stability result for the steklov laplacian eigenvalue problem with a spherical obstacle.

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In this paper we study the first Steklov-Laplacian eigenvalue with an internal fixed spherical obstacle. We prove that the spherical shell locally maximizes the first eigenvalue among nearly spherical sets when both the internal ball and the volume are fixed.

This is based on a joint work with G. Paoli and G. Piscitelli.