NODAL COUNTS FOR THE DIRICHLET-TO-NEUMANN OPERATOR

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November 29, 2021

Nodal sets of Steklov eigenfunctions on manifolds with boundary have been extensively studied in recent years. Somewhat less well understood are the nodal sets of their restrictions to the boundary, that is, the eigenfunctions of the Dirichlet-to-Neumann operator. In particular, little is known about nodal counts. In this talk we explore this problem and prove an asymptotic version of Courant's nodal domain theorem for Dirichlet-to-Neumann eigenfunctions.

This is joint work with Asma Hassannezhad (Bristol).