Nodal Sets of Robin and Neumann Eigenfunctions

We investigate the measure of nodal sets for Robin and Neumann eigenfunctions in the domain and on the boundary of the domain. A polynomial upper bound for the nodal sets is obtained for the Robin eigenfunctions. For the analytic domains, we show a sharp upper bound for the nodal sets on the boundary of the Robin and Neumann eigenfunctions. Furthermore, the sharp doubling inequality and vanishing order are obtained.

Light refreshments will be served at 1:30pm in E424A.