1107-58-91 **Xing Wang*** (xwang@math.jhu.edu), Department of Mathematics, Johns Hopkins University, Baltimore, MD 21218, USA, and **Jiuyi Zhu**. *A lower bound for the nodal sets of Steklov eigenfunctions*

In this talk, I'm going to talk about my recent joint work with Jiuyi Zhu. We consider the lower bound of nodal sets of Steklov eigenfunctions on smooth Riemannian manifolds with boundary–the eigenfunctions of the Dirichlet-to-Neumann map. Let N_λ be its nodal set. Assume that zero is a regular value of Steklov eigenfunctions. We show that

$$H^{n-1}(N_\lambda) \geq C\lambda^{\frac{3-n}{2}}$$

for some positive constant C depending only on the manifold. (Received January 04, 2015)