Abstract:

Let $X$ be a compact manifold with the boundary $\partial X$ and $R (i\omega)$ be a Dirichlet-to-Neumann operator: $R (i\omega): f \mapsto u|_{\partial X}$ where $u$ solves $(\Delta + i\omega^2) u = 0$, $u|_{\partial X} = f$. We establish asymptotics as $\omega \to \pm \infty$ of the number of eigenvalues of $\omega^{-1} R (i\omega)$ between $s_1$ and $s_2$.

This is a joint work with Andrew Hassell, Australian National University.