

David Borthwick

Title: Symmetry factorization of Selberg zeta functions and distributions of resonances

(Joint work with Tobias Weich)

Abstract: We discuss a factorization of the Selberg Zeta function that applies to hyperbolic manifolds generated by Schottky groups and possessing discrete symmetries. The factorization results in dramatically improved convergence rates for calculations of resonances. We apply these methods to shed new light on the phenomenon of resonance chains in hyperbolic surfaces, and on the recent essential spectral gap conjecture of Jakobson and Naud.