RESONANCES IN A STRIP: MANIFOLDS WITH CUSPS

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Abstract: Decades ago, Selberg observed that the resonances of a constant -1 curvature surface with cusps all lie in a vertical strip $\{1 - \delta < \Re s < 1/2\}$. I will explain how one can extend such a result to variable negative curvature metrics, under a generic (and open) assumption on the metric. Expect to hear about Poincaré sums, WKB propagation, and scattered geodesics !