FRÉDÉRIC ROCHON, UQAM

Compactness of relatively isospectral sets of surfaces with cusps

We introduce a notion of relative isospectrality for surfaces with boundary having possibly non-compact ends either conformally compact or asymptotic to cusps. We obtain a compactness result for such families via a conformal surgery that allows us to reduce to the case of surfaces hyperbolic near infinity recently studied by Borthwick and Perry, or to the closed case by Osgood, Phillips and Sarnak if there are only cusps. This is a joint work with Pierre Albin and Clara Aldana.