

# Numerical computations of Maass cusp forms. How to find all eigenvalues in a given interval.

Holger Then

## **Abstract**

With Hejhal's algorithm it is possible to compute a large number of eigenvalues and expansion coefficients of Maass forms numerically. But it is expensive to find all eigenvalues in a given interval, since the routine for detecting eigenvalues oversees some and therefore needs to be rerun repeatedly until one expects that all eigenvalues are found. In my talk I will bring forward a conjecture that allows to find all eigenvalues in a given interval within one single run.