

BASS NOTES OF CLOSED ARITHMETIC HYPERBOLIC SURFACES

Bram Petri

ABSTRACT

The spectral gap (or bass note) of a closed hyperbolic surface is the smallest non-zero eigenvalue of its Laplacian. This invariant plays an important role in many parts of hyperbolic geometry. In this talk, I will speak about joint work with Will Hide on the question of which numbers can appear as spectral gaps of closed arithmetic hyperbolic surfaces.