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Logarithmic lower bound for the number of nodal domains

In prior work with Junehyuk Jung, we proved that the number of nodal domains tends to infinity along a subsequence of density one of eigenfunctions of the Laplacian on real Riemann surfaces of negative curvature. This talk improves the result by giving a log lower bound. It stems from log scale quantum ergodicity results of Hezari-Riviere and Han.