Bounds for automorphic L-functions

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We prove a subconvexity bound for Rankin-Selberg L-functions $L(s, f \times g)$ associated with a Maass cusp form f and a fixed cusp form g in the aspect of the Laplace eigenvalue $1/4 + k^2$ of f, on the critical line $\Re s = 1/2$. Using this subconvexity bound, we prove the equidistribution conjecture of Rudnick and Sarnak on quantum unique ergodicity for dihedral Maass forms. Also proved here is that the generalized Lindelöf hypothesis for the central value of our L-function is true on average.