Rankin-Selberg L-functions on the critical line

Abstract

Let f and g be two primitive (holomorphic or Maass) cusp forms of arbitrary level, character and weight resp. spectral parameter, and let $L(s, f \times g)$ be the associated Rankin-Selberg L-function. If we fix g and let the weight resp. spectral parameter μ_f of f vary, then for s on the critical line, the estimate $L(s, f \times g) \ll_{s,g,\varepsilon} \mu_f^{\alpha+\varepsilon}$ with $\alpha = \frac{6-2\theta}{7-4\theta}$ is shown where $\theta \leq \frac{7}{64}$ is an admissible value for the Ramanujan-Petersson-conjecture.