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**Jeff Hoffstein, Maria M. Nastasescu and Min Lee\*** ([min.lee@bristol.ac.uk](mailto:min.lee@bristol.ac.uk)). *First moments of Rankin-Selberg convolutions of Automorphic forms on  $GL(2)$ .*

We obtain a first moment formula for Rankin-Selberg convolution L-series of automorphic forms of arbitrary level on  $GL(2)$ , with an orthonormal basis of Maass forms. One consequence is the best result to date, uniform in level, spectral value and weight, for the equality of two automorphic cusp forms if their Rankin-Selberg convolutions with the orthonormal basis of Maass forms are equal at the central strip for sufficiently many Maass forms. (Received February 14, 2021)