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On τ -Li coefficients for Rankin-Selberg L -functions. (English) Zbl 1383.11065

Bertin, Marie José (ed.) et al., Women in numbers Europe. Research directions in number theory. Based on the presentations at the WINE workshop, Luminy, France, October 13–18, 2013. Cham: Springer (ISBN 978-3-319-17986-5/hbk; 978-3-319-17987-2/ebook). Association for Women in Mathematics Series 2, 167-190 (2015).

Summary: The generalized τ -Li criterion for a certain zeta or L -function states that non-negativity of τ -Li coefficients associated to this function is equivalent to non-vanishing of this function in the region $\operatorname{Re} s > \tau$. For $\tau \in [1, 2)$ and positive integers n , we define τ -Li coefficients $\lambda_n(\pi \times \pi', \tau)$ associated to Rankin-Selberg L -functions attached to convolutions of two cuspidal, unitary automorphic representations π and π' . We investigate their properties, including the Archimedean and non-Archimedean terms, and the asymptotic behavior of these terms.

For the entire collection see [\[Zbl 1329.11002\]](#).

MSC:

- 11F66** Langlands L -functions; one variable Dirichlet series and functional equations
- 11F67** Special values of automorphic L -series, periods of automorphic forms, cohomology, modular symbols
- 11F70** Representation-theoretic methods; automorphic representations over local and global fields

Cited in **3** Documents**Keywords:**

Rankin-Selberg L -functions; τ -Li criterion; unitary automorphic representations

Full Text: [DOI](#)

References:

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