Dirichlet Series Under Standard Convolutions: Variations on Ramanujan's Identity for Odd Zeta Values

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Inspired by a famous identity of Ramanujan, we propose a general formula linearizing the convolution of Dirichlet series as the sum of Dirichlet series with modified weights; its specialization produces new identities and recovers several identities derived earlier in the literature, such as the convolution of squares of Bernoulli numbers by A. Dixit and collaborators, or the convolution of Bernoulli numbers by Y. Komori and collaborators. This is joint work with P. Chavan, S. Chavan and T. Wakhare.