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Sums of singular series and the distribution of primes

The Hardy–Littlewood conjectures predict that the number of times a specific configuration of length k appears in the primes is governed by constants known as singular series. Via applications of the Hardy–Littlewood conjectures, sums of these constants have many applications in the study of the distribution of primes. We will discuss some results about refined sums of singular series and their applications, including sums over large sets and the tail of the distribution of primes in short intervals.