1145-30-932   **Lida Ahmadi*** (`lahmadi@purdue.edu`) and **Mark Daniel Ward** (`mdw@purdue.edu`).
Asymptotics of the number of bosonic string states.

We analyze the precise first-order asymptotics of the number of bosonic string states, by analyzing the analogous generating function. This yields a succinct approximation for the enumeration, according to mass level. Our methodology utilizes the Mellin transform and application of the saddle point method, to obtain the first-order asymptotics of the coefficients of the analogous generating function. The method of analysis resembles the Hardy–Ramanujan (refined by Rademacher) methodology for the asymptotic analysis of the number of integer partitions. (Received September 17, 2018)