

(Joint work with M. Balazs and J. Jay)

The Jacobi triple product is a foundational  $q$ -series identity that relates an infinite sum with an infinite product. It has many applications and can be interpreted in many different ways (combinatorially, physically, representation theoretically, automorphically...).

Recently, Balazs and Bowen found a natural probabilistic incarnation of the Jacobi triple product, arising from an equivalence of certain probability measures attached to interacting particle systems. In this talk I'll explain how this works and present new identities coming from an extension of these ideas. Further, I will give combinatorial motivation for our identities by connecting with generalised Frobenius partitions.

Intrigued as to how an automorphic former became a former automorphic? Come along and find out!