

1129-05-174

Richárd Rimányi, Anna Weigandt* (weigndt2@illinois.edu) and **Alexander Yong**.

Partition Identities and Quiver Representations.

We present a particular connection between classical partition combinatorics and the theory of quiver representations. Specifically, we give a bijective proof of an analogue of A. L. Cauchy's Durfee square identity to multipartitions. We then use this result to give a new proof of M. Reineke's identity in the case of quivers Q of Dynkin type A . Our identity is stated in terms of the lacing diagrams of S. Abeasis - A. Del Fra, which parameterize orbits of the representation space of Q . (Received March 14, 2017)