

Combinatorial Telescoping for an Identity of Andrews on Parity in Partitions

William Y.C. Chen, Daniel K. Du and Charles B. Mei

Abstract: Recently Andrews proposed a problem of finding a combinatorial proof of an identity on the q -little Jacobi polynomials. We give a classification of certain triples of partitions and find bijections based on this classification. By the method of combinatorial telescoping for identities on sums of positive terms, we establish a recurrence relation that leads to the identity of Andrews.

AMS Classification: 05A17, 11P83

Keywords: creative telescoping, combinatorial telescoping, partition, q -little Jacobi polynomial

Download: [PDF](#)

[Return](#)