

1086-11-1951 **Karl Mahlburg*** (mahlburg@math.lsu.edu) and **Kathrin Bringmann**. *Asymptotic inequalities for positive rank and crank moments.*

Andrews, Chan, and Kim recently introduced a modified definition of crank and rank moments for integer partitions that allows the study of all moments, following Atkin and Garvan's earlier study of even moments. The main result of this talk states that while the two families of moment functions are asymptotically equal, the crank moments are always asymptotically larger than the rank moments.

The generating functions include expressions involving false theta functions, and the proofs require the Circle Method along with other analytic techniques, such as Mittag-Leffler theory and Mellin transforms. (Received September 24, 2012)