

1116-33-571

George E Andrews* (gea1@psu.edu), Department of Mathematics, Pennsylvania State University, 306 McAllister Bldg., University Park, PA 16802. *Partitions associated with the mock theta functions $\omega(q)$ and $\nu(q)$.*

This is a report on joint work with Atul Dixit and Ae Ja Yee. We study the generating function for partitions with repeated (resp. distinct) parts such that each odd part is less than twice the smallest part. Surprisingly, the generating function turns out to be $\omega(q)q$ (resp. $\nu(-q)$), where $\omega(q)$ and $\nu(q)$ are two of the third order mock theta functions of Ramanujan. We also consider associated smallest parts functions. Here our work has overlap with that of Garvan and Jennings-Shaffer. (Received September 07, 2015)