

# Enumeration of partitions with prescribed successive rank parity blocks

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The  $i$ -th rank of a partition, which was introduced by Atkin, is the number of dots in the  $i$ -th row minus the number of dots in the  $i$ -th column in the Ferrers graph. Recently, in the study of singular overpartitions, Andrews revisited successive ranks and parity blocks. Motivated by his work, we investigate partitions with prescribed successive rank parity blocks. In this talk, I will discuss the generating function of partitions with exactly  $d$  successive ranks and  $m$  parity blocks. This is joint work with S. Seo from Kangwon National University.