

A New Partition Statistic

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Partition theory has traditionally revolved around the size statistic for partitions and the partition function $p(n)$, which counts the number of partitions of size n . In recent work with Just, Schneider, and Sharp, I have explored a new perspective on partitions that focuses more on multiplicative aspects of partitions than their classical additive structure. In this talk, I will give a short overview of partitions from an additive standpoint and then define a new, multiplicative partition statistic called the “supernorm.” I will also present several different applications of the supernorm in combinatorics, analytic number theory, and algebraic number theory.