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Eric T. Mortenson* (mort@math.psu.edu), Department of Mathematics, Penn State University, University Park, PA 16802. *On the Broken 1-Diamond Partition.*

In a recent work of G. Andrews and P. Paule, using MacMahon's Partition Analysis, they initiated the study of broken k -diamond partitions. Their study of the respective generating functions led to an infinite family of modular forms, about which they produced interesting arithmetic theorems and conjectures for the related partition functions. Here we discuss the broken 1-diamond partition, a statistic, and associated congruences. (Received September 11, 2006)