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*An improved “zoom rate” for the Folsom-Kent-Ono  
 $\ell$ -adic fractal behavior of partition values*

**Abstract:** In recent work, Folsom, Kent, and Ono show that for primes  $\ell \geq 5$ , values of the partition function are  $\ell$ -adically fractal. This arises from the fact that under alternate iteration of certain operators, the generating function for  $p(n) \pmod{\ell^m}$  eventually lands in a finite-rank submodule which is stable under these operators. We improve the bound on the number of iterates (the “zoom rate”) required for this process to stabilize. Calculations show that this bound is sharp for small  $\ell$  and  $m$ .