

1054-00-103

Kate E Ellis* (darkwriter06@yahoo.com). *Zeta Functions of a Measure on a Cantor String.*

Measures supported on the complement of a fractal string have been shown to have multifractal structure, even when supported on a countable set. In this talk, the regularity values and resulting families of partition and multifractal zeta functions of such a measure (supported on the complement of a type of Cantor string) are described and analyzed. These results are expected to yield a spectrum of dimensions associated with the measure. (Received September 08, 2009)