1054-00-223 Michael C Mackenzie* (fenderbites@aol.com), Modesto, CA. Partition Zeta Functions of a Trinomial Measure.

The binomial measure on the Cantor set has a multifractal spectrum which yields a full family of real-valued dimensions associated with the multiscale behavior of the measure. One way to derive this multifractal spectrum is to analyze the partition zeta functions of the measure. In this talk, the collections of regularity values and partition zeta functions of a trinomial measure are derived and considered, potentially laying the groundwork for the determination of its multifractal spectrum. (Received September 14, 2009)