1062-28-183 Kate E Ellis* (kellis1@csustan.edu). The Counting Functions for an Atomic Measure. It has been shown that the geometric counting function of a fractal string can be expressed in terms of a sum over its complex dimensions. For this talk, we will be working with an atomic measure supported on the boundary of the Cantor string. We will develop and analyze the geometric counting function of this fractal string. We will also discuss regularity, partition zeta functions, and complex dimensions as they pertain to our example. (Received August 07, 2010)