1054-00-26 **Shane A. Gibson*** (weezel515@yahoo.com), 3708 Woodview Drive, Ceres, CA 95307. *The Minkowski and Hausdorff Dimensions of Related Fractal Strings.*

The geometric zeta function of a fractal string and the Minkowski dimension of its boundary depend only on the sequence of lengths of the open intervals which make up the string. However, the Hausdorff dimension of the boundary depends on the arrangement of the intervals and not just their lengths. In this talk, it is shown that for certain related fractal strings, the topological zeta function yields the Hausdorff dimension of the boundary of a given string in much the same way that the geometric zeta function determines the Minkowski dimension. (Received August 03, 2009)