

1035-11-1040 **Micah B. Milinovich*** (micah@math.rochester.edu), Math Department, University of Rochester, Rochester, NY 14620. *Upper bounds for Discrete Moments of the Riemann Zeta-Function*. Preliminary report.

Assuming the Riemann Hypothesis, we establish upper bounds for discrete moments of the Riemann zeta-function and its derivative at or near the zeros of $\zeta(s)$ that are close to the conjectured order of magnitude. These results follow from a general value distribution lemma that provides upper bounds the frequency of large values of $\zeta(s)$ near its zeros. Our proof is based upon a recent method of K. Soundararajan that provides analogous bounds for continuous moments of the Riemann zeta-function as well as moments of other families of L-functions at the central point. (Received September 18, 2007)