

STEVE GONEK, University of Rochester, Rochester, NY 14627  
*A Statistical Model for the Riemann Zeta Function*

The recent random matrix characteristic polynomial models for the Riemann zeta function and other  $L$ -functions have allowed us to predict answers to a variety of questions previously considered intractable. However, random matrices carry no arithmetical information, so one generally has to insert this component of the answer in an *ad hoc* manner. I will present a new model developed with C. Hughes and J. Keating that avoids this problem and illustrate its applications.