

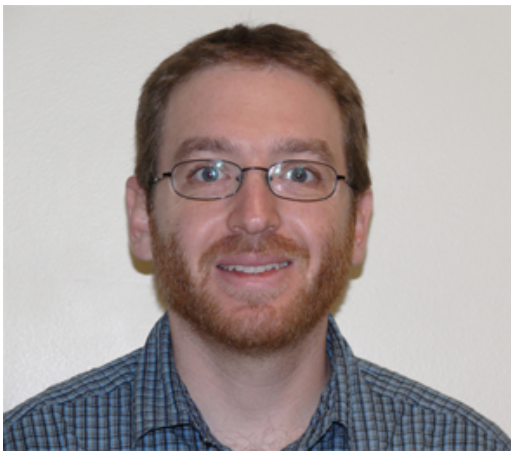


# COLLOQUIUM SPEAKER SERIES

Mathematics and Computer Sciences

Friday March 19, 2010

11:00-11:50 in room B775



## Micah Milinovich

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University of Mississippi  
Ph.D., University of Rochester, 2008

### RESEARCH INTERESTS:

Analytic Number Theory,  
theory of the Riemann zeta-function,  
L-functions,  
and multiplicative number theory.

## The vertical distribution of the zeros of the Riemann zeta-function

Understanding the distribution of the zeros of the Riemann zeta-function has been an important goal of mathematics over the last century. It is believed that all the nonreal zeros of the zeta-function lie on a vertical line, called the critical line. The conjecture is known as the Riemann Hypothesis (RH). Assuming the RH, it is not hard to compute the average spacing between consecutive zeros of the Riemann zeta-function on the critical line. In this talk I will describe various methods that show these zeros are not regularly spaced. In particular, I will describe some methods that show there are in finitely many pairs of consecutive zeros that are significantly farther apart than average and that there are infinitely many pairs of zeros that are closer together than average.

**There will be coffee and cookies.  
Everyone is welcome!**