

## **abstract**

Mathematical Conversations  
Topic:

Speaker:

Affiliation:

Date:

Time/Room:

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The Riemann zeta function is the most important function of number theory, and a great part of modern research in number theory is dedicated to its study and the study of its relatives the L-functions. It was Riemann who revolutionized number theory by studying the zeta function with a complex variable, but its definition and its study on the real line was initiated by Euler. However, Riemann's program in number theory is not complete, since one of the assumptions of his paper is still a famous unresolved problem. We will study links between the Riemann Hypothesis and prime number theory, studying in particular a phenomenon first observed by Chebyshev: there seems to be more primes of the form  $4n+3$  than of the form  $4n+1$ .