



DEPARTMENT OF MATHEMATICS AND STATISTICS

COLLOQUIUM

Speaker: Dr. Timothy Boester, Wright State University

Title: Teaching and Learning the Formal Definition of Limit

Date: February 3, 2012

Room/Time: Refreshments: 2:30 p.m. Room: 222 MM
Talk: 3:00 p.m. Room: 224 MM

Host: Dr. Aina Appova

ABSTRACT:

How do calculus students conceptualize the formal definition of limit? How can we successfully teach the formal definition of limit to students? Tim will briefly review the history of research on limit conceptions and survey a promising new wave of research in this area. The focus of the talk will be on Tim's recent work on categorizing and diagnosing student understanding of the logical implications in the definition. This talk will be suitable for undergraduates and will (hopefully) be of interest to those who teach calculus and analysis.

ABOUT THE SPEAKER:

After receiving a bachelors degree in mathematics from the University of Chicago, Tim transitioned to studying mathematics education at the University of Wisconsin-Madison. He received a Ph.D. in educational psychology and a masters degree in mathematics based on his research on how students conceptualize limits in undergraduate calculus classrooms. He continues this work as an Assistant Professor at Wright State University. Tim also enjoys writing puzzles for his "Knossos Games" column in Imagine magazine, and is an avid hiker and cinephile.