



# Undergraduate Colloquium

UMD Department of Mathematics and Statistics

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## What is Theoretical Computer Science?

by  
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**Abstract:** In this talk, we will give a survey of various areas of theoretical computer science and the role that mathematics plays in these areas. We will discuss some applications such as machine learning and voting theory, as well as some theoretical topics. We will also discuss some real-world problems (that we would really like to be able to solve), which appear to be computationally hard not only to solve exactly, but also to solve approximately.

The material presented in the talk will be heavily influenced by the problems studied during the "Real Analysis in Computer Science" program (which the speaker attended as a Research Fellow) held during Fall 2013 at the Simons Institute for the Theory of Computing at the University of California-Berkeley.

**Thursday, March 6, 2014**

**3:00-4:00 PM**

**MoH 203**

**EVERYONE IS WELCOME**

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