



Michigan State University
Department of Mathematics

Distinguished Undergraduate Lecture Series

Olga Holtz

“The Blessings and Curses of Complexity”

Ever since the invention of the first algorithms, mathematicians wondered how “complex” such computational procedures are. This talk will offer an excursion into the world of complexity. How fast can we determine if a given number is prime, find the greatest common divisor of two polynomials, or multiply two matrices? What problems are solvable in polynomial time? What are randomized algorithms and how complex are they? What is communication complexity? And why should we care whether or not P equals NP ?

Olga Holtz received her PhD in Mathematics from the University of Wisconsin-Madison under the guidance of Hans Schneider. Currently, Holtz is a Professor of Mathematics at the University of California-Berkeley. She has received numerous mathematical prizes and is an award-winning screenwriter and film director.

Saturday, April 15th, 2017 - 4:10 pm to 5:00 pm - C304 Wells Hall

The lecture will be preceded by the Student Mathematics Conference 9:15 am - 4:00 pm, and followed by dinner at 5:15 pm.