

About the Erdős Memorial Lecture

The Erdős Memorial Lecture is an annual invited address that is delivered during a selected sectional meeting of the American Mathematical Society. The lecture is made possible by a fund created by **Andrew Beal**, a Dallas banker and mathematics enthusiast. The Lecture is named for the prolific mathematician **Paul Erdős** (1913-1996). The Beal Prize Fund, now US\$100,000, is being held by the AMS until it is awarded for a correct solution to the Beal Conjecture (see www.math.unt.edu/~mauldin/beal.html). At Mr. Beal's request, the interest from the fund is used to support the Erdős Memorial Lecture.

Previous Erdős Memorial Lecturers

- 1999 **Ronald L. Graham**, AT&T Labs
- 2000 **John H. Conway**, Princeton University
- 2001 **Carl Pomerance**, Bell Laboratories
- 2002 **Hillel Furstenberg**, Einstein Institute of Mathematics
- 2003 **Avi Wigderson**, Institute for Advance Study
- 2004 **Bernd Sturmfels**, University of California at Berkeley
- 2005 **Persi Diaconis**, Stanford University
- 2006 **Béla Bollobás**, University of Memphis and Cambridge University
- 2007 **Andrew J. Granville**, Université de Montréal
- 2008 **William Timothy Groves**, Cambridge University
- 2009 **Jeffrey Lagarias**, University of Michigan

American Mathematical Society
and
Department of Mathematics
University of Kentucky

2010 Erdős Memorial Lecture

Professor Doron Zeilberger
Rutgers University



$3x+1$

Saturday, March 27, 2010
8:00 pm

White Hall Classroom Building (CB), Room 118
Reception at 6:15 pm, King Alumni House

About the Speaker

Doron Zeilberger (b. July 2, 1950) is Board of Governors Professor of Mathematics at Rutgers University.

He received his PhD in 1976 from the Weizmann Institute of Science under the direction of Harry Dym. He has three biological children and (so far) nineteen academic children. In 1998 he shared, with Herbert Wilf, the American Mathematical Society's Steele prize for seminal contributions to research, and in 2004 he was awarded the Institute for Combinatorics Euler medal.

$3x+1$

Abstract

Paul Erdős once said that mathematics is not yet ready to tackle the notorious Collatz $3x+1$ problem, and he was probably right, as far as purely human attempts are concerned. But I believe that a creative collaboration with machinekind may increase the chance of a proof from epsilon squared to epsilon, and even if we don't find a proof, trying it out should be fun.