ABOUT THE LECTURE
"The Secrets of Mental Math"

Dr. Arthur Benjamin is a Professor of Mathematics at Harvey Mudd College in Claremont, California. He is also a professional magician, and in his entertaining and fast-paced performance, Dr. Benjamin will demonstrate how to mentally add and multiply numbers faster than a calculator, how to memorize 100 digits of pi, how to figure out the day of the week of any date in history, and other amazing feats of mind. For the last 30 years, he has presented his mixture of math and magic all over the world to thousands of groups. He has authored several books, including "Secrets of Mental Math," and the DVD course "The Joy of Mathematics" and has received national awards for his writing and teaching.

Dr. Benjamin has appeared on many television and radio programs, including The Today Show, CNN, and National Public Radio. He has been profiled in The New York Times, Los Angeles Times, USA Today, Scientific American, Discover Magazine, Omni Magazine, Esquire, People, and Reader's Digest. In 1997, Dr. Benjamin applied his talents to the game of backgammon and won the American Backgammon Tour.

In their "Best of America" issue, Reader's Digest recently called him "America's Best Math Whiz."

The inaugural Daniel Bartlett Memorial Lecture was given in 2008 by Barry Mazur, Gerhard Gade University Professor, Harvard University

2009: Dr. Jeff Weeks, MacArthur Fellow and 2007 winner of the AMS Conant Prize for an excellent expository publication.

2010: Dr. Thomas Banchoff Brown University and Past President of The Mathematical Association of America

MATHEMATICS
UASCIENCE

Members of the department create, communicate, and apply mathematics of the highest caliber through activities such as internationally recognized research and graduate education, award winning undergraduate programs, and extensive outreach to local schools.

The department's faculty includes two Regents' Professors, three University Distinguished Professors, and numerous recipients of national and international awards. Over the last five years, a large percentage of the faculty has been awarded grants and contracts from external funding agencies, with total awards averaging about $5 million per year.

The department offers PhD, MS, and MA programs in Mathematics and Mathematics Education, and it provides major contributions to the Graduate Interdisciplinary Degree Programs in Applied Mathematics and Statistics. It also offers several unique post-doctoral opportunities for recent PhDs planning careers in research and education.

At the undergraduate level, the department provides more than 46,000 credit hours of instruction per year and offers its more than 500 majors unparalleled opportunities for research, tutoring experiences, and internships. The undergraduate, graduate, and GIDP programs have recently been recognized with two 5-year, $3.5 million VIGRE training grants from the National Science Foundation, a distinction very few programs in the country can match.
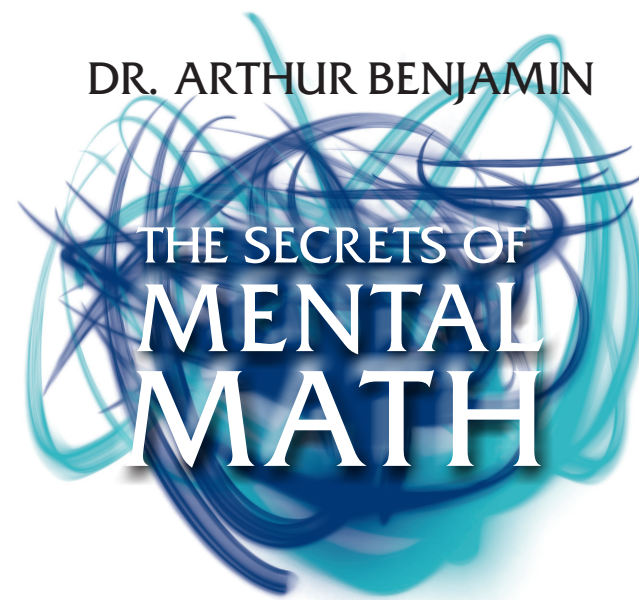
The department has a long and excellent tradition of outreach to schools in Tucson, ranging from programs supporting high school teachers to a research center focusing on improving the mathematics education of low-income Latino students.

Through the breadth and quality of its programs, the Department of Mathematics makes major contributions to the mission of the University of Arizona and to the quality of life in Tucson and beyond.

William McCallum
Professor of Mathematics
Department Head

DANIEL BARTLETT MEMORIAL LECTURE 2011

DR. ARTHUR BENJAMIN

THE SECRETS OF MENTAL MATH

OCTOBER 17, 2011
6:30 PM
GALLAGHER THEATER
STUDENT UNION MEMORIAL CENTER
1303 E. UNIVERSITY DRIVE
THE UNIVERSITY OF ARIZONA

THE UNIVERSITY OF ARIZONA

ABOUT ARTHUR BENJAMIN

Arthur Benjamin earned his B.S. in Applied Mathematics from Carnegie Mellon and his PhD in Mathematical Sciences from Johns Hopkins. Since 1989, he has taught at Harvey Mudd College, where he is Professor of Mathematics and past Chair. In 2000, he received the Haimo Award for Distinguished Teaching by the Mathematical Association of America, and served as the MAA's Polya Lecturer from 2006 to 2008.

His research interests include combinatorics and number theory, with a special fondness for Fibonacci numbers. Many of these ideas appear in his book (co-authored with Jennifer Quinn), "Proofs That Really Count: The Art of Combinatorial Proof", published by MAA. In 2006, that book received the Beckenbach Book Prize by the MAA. Professors Benjamin and Quinn were the editors of Math Horizons magazine from 2004 through 2008. He co-edited (with Ezra Brown) the book, "Biscuits of Number Theory" and is currently working on a book on Graph Theory.

Art is also a magician who performs his mixture of math and magic to audiences all over the world, including the Magic Castle in Hollywood. He has demonstrated and explained his calculating talents in his book "Secrets of Mental Math". He has created DVD courses for The Great Courses series on The Joy of Mathematics, Discrete Mathematics, and The Secrets of Mental Math. He is currently creating a new DVD course on The Mathematics of Games and Puzzles, and other book projects.

ABOUT DANIEL BARTLETT

Daniel Wezelman Bartlett was born November 8, 1980. He died of sudden cardiac arrest on August 8, 2006, just before commencing his fourth year of graduate school in mathematics at The University of Arizona. He was a wonderful and loving son to his parents, a close companion to his younger sister, and fierce friend for many.

Daniel was born with physical impairments, but that didn't stop him from enjoying life. He played piano, trumpet, and shofar; he was a chess player; and he was an academic athlete, winning scholarships and contests for Academic Decathlon, economics, and the annual Shakespere monologue competition (he loved portraying Iago). He was a proud leader in his B'rith Youth Organization.
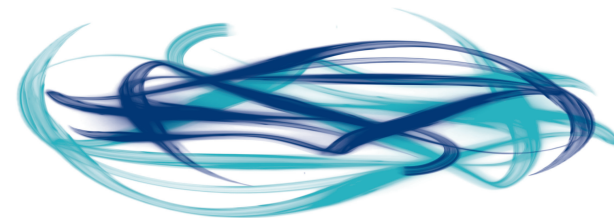
Daniel's academic interests were not restricted to mathematics. As a junior in high school he was selected for the Telluride Association Summer Program at Cornell, an intense program in the humanities.

He graduated from University High School in Tucson both as a Presidential Scholar and a National Merit Scholarship winner.

Daniel Bartlett *continued*

Daniel loved mathematics and excelled at it all his life. He went to Harvard for his undergraduate work, concentration in mathematics, where his undergraduate advisor was Barry Mazur. While an undergraduate, he worked one summer at The University of Arizona Astronomy Department and another summer at the National Security Administration, where he co-authored a classified paper. He received his BA degree in 2003.

While studying for his PhD at The University of Arizona, Daniel had narrowed his research interest to the field of algebraic geometry, and at the time of his death he was beginning the work he hoped to use for his doctoral dissertation.

DANIEL BARTLETT MEMORIAL FUND

Generous contributions by Daniel's family and friends have made it possible to establish this fund, whose purposes are to memorialize Daniel Bartlett, to foster awareness and appreciation of mathematics of the highest level in the Tucson community, and to support graduate education in Mathematics at The University of Arizona.