MAA MD-DC-VA Section Undergraduate Conference April 1 and 2, 2005 University of Virginia Charlottesville, Virginia (Program Updates Will Be Posted When Available)

Friday April 1, 2005:

Time	Location	Event
4:00–6:00 pm	Clark 102	Student Social/Games Event
6:00–7:00 pm	Courtyard by Marriott: 1201 W. Main Street	Registration and Cocktails
7:00–8:00 pm	Courtyard by Marriott: 1201 W. Main Street	Banquet Welcoming Remarks: Dr. Jeffrey Holt, Chair, Department of Statistics, University of Virginia
8:00–9:00 pm	Courtyard by Marriott: 1201 W. Main Street	Invited Talk: James Tanton A Dozen Proofs that 1=2: A Misguided Review of all of Mathematics

Saturday, April 2, 2005: Events are in Cabell Hall and Wilson Hall, University of Virginia (Wilson adjoins Cabell via a 3rd floor walkway)

- (**) indicates a talk recommended for all students
- (##) indicates a talk recommended for graduate students

All Project NeXT events are in Cabell 338

Time	Location	Event
8:00–noon	Cabell 331	Registration (Refreshments at 8:30 am)
8:00 am – 3 pm	Cabell 318	Display of Mathematical Artwork by Artist Judith Townsend
8:30 – 8:50 am		Student Papers 1
	Cabell 332	Emily Wooge, Roanoke College: Image Processing with Fourier Series and Wavelets
	Cabell 341	Michael Naylor, Hood College: Audio Compression and Linear Algebra
8:30 – 8:50 am		Contributed Papers 1
	Cabell 316	James V. Blowers, US Army Ret'd: (**) Some results on the Hat-Guessing Game

	Cabell 323	Jiashi Hou, Norfolk State University: (**) Mathematical model for teaching business cycles
	Cabell 324	Robert W. Jernigan, American University: (**) Statistics Before Your Eyes: Photographs of Statistical Concepts
	Cabell 330	Hongwei Chen, Christopher Newport University: (**) On some trigonometric powers
8:55 – 9:15 am		Student Papers 2
	Cabell 332	Karen Jones, Hood College: <i>Highlights of U.S. Performance in</i> 2003 TIMMS Assessment
	Cabell 341	Andrew Bashelor, US Naval Academy: <i>Projective Conics and</i> <i>Excess Intersection</i>
8:55 – 9:15 am		Contributed Papers 2
	Cabell 316	Matthew Burke, St. Mary's College of Maryland: (**) <i>Two-</i> <i>dimensional "Take and Break" Games</i>
	Cabell 319	Deborah Denvir, Randolph-Macon Women's College: (**) <i>Miquel's Theorem, a lovely but overlooked result in</i> <i>Euclidean geometry.</i>
	Cabell 323	Luca Petrelli, Mount St. Mary's University: (##) Optimal Transport and Wasserstein Metric
	Cabell 324	Howard Penn, United States Naval Academy: (**) Which Major-League Ball Parks Are Homer-Friendly?
	Cabell 330	Richard Hammack, Randolph-Macon College: (**) A Visual Proof of the Alternating Series Test
9:20 – 10:20 am	Cabell 320	Student Poster Session
9:20 – 9:40 am		Contributed Papers 3
	Cabell 316	Greg Dresden, Washington & Lee University: (**) <i>Rings of</i> <i>Gaussian Integers</i>
	Cabell 319	Christopher Marron, Department of Defense: (**) <i>Title to be announced</i>
	Cabell 323	George DeRise, Thomas Nelson Community College: (**) <i>Topology in Physics</i>
	Cabell 324	Vonda K.Walsh, Lee S. Dewald, and L. Jane Randall, VMI: (**) Peer-led Team Learning (PTL) in Finite Mathematics and in Introduction to Probability and Statistics at Virginia Military Institute
9:20 – 10:55 am		COMAP Modeling Contest Presentations by Section Teams Receiving Outstanding or Meritorious Ratings
9:20 - 9:40	Cabell 345	Joshua Blake, Justin Creasy, Nicholas Giffen, James Madison University (Meritorious Rating, coached by James Sochacki): (**) Problem A: A Dam Disaster
9:45 - 10:05	Cabell 345	Jonathan Giuffrida, Palmer Mebane, Maggie Walker Governor's School, Richmond VA (Outstanding Rating, coached by John Barnes): (**) <i>Problem C:Petroleum</i> <i>Armageddon</i>
10:10 - 10:30	Cabell 345	Yuan Rao, Angela Zhu, Maggie Walker Governor's School, Richmond VA (Meritorious Rating, coached by John Barnes):

		(**) Problem C: The Petrification of Petrochemical Production
10:35 - 10:55	Cabell 345	Robin Haskins and Nathaniel Givens, University of Richmond (Meritorious Rating, coached by Kathy Hoke): (**) <i>Last Exit</i> <i>before the Toll.</i>
10:20 – 10:40 am		Student Papers 3
	Cabell 332	Sarah Gourlie, American University: Graphical Studies of the Complex Geometric Series $f(z)$ =sum from k to infinity of z^k
	Cabell 341	Zachary Kurtz, Eastern Mennonite University: A Two-Player Number Game: Finding the Winning Strategy
10:50 – 11:00 am	Wilson 301	Welcoming Remarks: George Hornberger, Associate Dean for the Sciences and Ernest H. Ern Professor of Environmental Sciences
11:00 am – noon	Cabell 345	Workshop with James Tanton: <i>Weird Multiplication and</i> <i>Weird Ways to Multiply</i>
Noon – 1:00 pm	Cabell 331	LUNCH: Box lunches distributed in Cabell 331
1:10 – 2:00 pm	Wilson 301	Invited Address 2: Harrison Straley IV, Wheaton College, Norton MA, and Sir Isaac Newton, late of Cambridge University. <i>Isaac Newton</i>
2:10 – 3:00 pm	Cabell 345	Panel Discussions
3:00 pm	Cabell 331	Refreshments
3:15 – 3:35 pm	Wilson 301	Prize Session and Wrap Up