## MAA Student Talks (page 1)

MAA #1	Taos Room	Thursday August 4
1:00–1:15 Ross Kravitz	Williams College	Diophantine Approximations
1:17–1:32 Asela Acosta	Texas A&M University	An Epidemic Model of HSV-1
1:34–1:49 Haiyun Zhao	Stevens Institute	The Dynamics of Poverty and Crime
1:51–2:06 Genevieve Toutain	Simon's Rock College	Immigration as a Dynamic Model
2:08–2:23 Lorena Morales-Paredes	Univ. Alabama, Huntsville	Epidemiology of Influenza Virus
2:25–2:40 Alan Covert	Arizona State University	A Multi-City Epidemic Model
2:42–2:57 Carlos Chiquete	University of Arizona	Disease Spread & Population Density
MAA #2	Cochiti Room	Thursday August 4
1:00–1:15 Ashley Askew	Clayton State University	Second Order Equations on Time Scales
1:17–1:32 Amber De More	Austin Peay State University	A Probabilistic Approach to Derivatives
1:34–1:49 John Gemmer	Millersville University	The General Brachistochrone Problem
1:51–2:06 Ben Gibson	Wake Forest University	Fourth-Order Difference Equations
2:08–2:23 Andrew Harrell	Texas A&M University	Moore-Penrose Interpolation Methods
2:25–2:40 Nicholas Stucky-Mack	Harvard College	Parameter Identification Problems
2:42–2:57 Sean Sullivan	University of Texas, Austin	Parameter Identification Problems
MAA #3	Taos Room	Thursday August 4
3:00–3:15 Beverly Lytle	Allegheny College	Wavelets and Art
3:20–3:35 Mary Servatius	Worcester Poly. Institute	Tartini: Mathematics and Acoustics
3:40–3:55 Tim Major	Grand Valley State University	Bioinformatics Algorithms & MATLAB
4:00–4:15 Azra Panjwani	Univ. of California, Berkeley	The Spread of Minor Political Parties
4:20–4:35 Ludguier Montejo	Whitman College	Lifestyle Choices and Arterial Stenosis
4:40–4:55 Vladimir Ufimtsev	Univ. of Nebraska, Omaha	Generation of DNA Codes
5:00–5:15 Ammon Paquette	Augustana College	Godel's Incompleteness Theorems
5:20–5:35 Alexander Zupan	Gustavus Adolphus College	Patterns in Hausdorff Metric Geometry
MAA #4	Cochiti Room	Thursday August 4
3:00–3:15 Neil Mendoza	Williams College	Class Groups of Global Fields
3:20–3:35 Nathan Kaplan	Princeton University	Cubic Global Fields
3:40–3:55 Todd Shayler	Williams College	Divisibility of Global Fields I
4:00–4:15 Carl Erickson	Stanford University	Divisibility of Global Fields II
4:20–4:35 Sean Lee	Pepperdine University	Posets and k-ribbon Tableaux
4:40–4:55 Lisa Bishop	Occidental College	Differential Posets and k-ribbons
5:00–5:15 Samuel Otten	Grand Valley State University	Dual Billiards in the Hyperbolic Plane
MAA #5	Taos Room	Friday August 5
1:00–1:15 Nicole Casacchia		<u> </u>
1:17–1:32 Nicole Casaccina 1:17–1:32 Nicole O'Connell	Youngstown State University	Downed Trees in a Riparian Valley
	St. Norbert College	The Rinsing Problem
1:34–1:49 Elizabeth Eisemann	Augustana College	A Quadratic Congruence Equation
2:08–2:23 Siva Sankrithi 2:25–2:40 Nicholas Toombs	University of Washington	Octonions: Construction, Multiplication
	Montclair State University	A Model for Alzheimer's Disease
2:42–2:57 Daniel Walton	Harvey Mudd College	Diophantine Approximations of Curves

## MAA Student Talks (page 2)

MAA #6		Cochiti Room	Friday August 5
1:00-1:15 Kari	Barkley	Lafayette College	One-relator Knot Groups
1:20–1:35 Tho	mas Kindred	Williams College	Surfaces Bounded by Alternating Knots
1:40–1:55 Deb	bie Witczak	Benedictine University	The Connected Sum of n Trefoil Knots
2:00-2:15 Anh	Chu	University of Richmond	Medial and Boundary Geometry I
2:20-2:35 Mar	ion Kruse	University of Richmond	Medial and Boundary Geometry II
2:40–2:55 Ryan	n Grady	Colorado School of Mines	Conservation Laws & Hodge Decomposition
MAA #7		Taos Room	Friday August 5
3:00–3:15 John	Chatlos	Williams College	Review of Commutative Rings
3:17-3:32 Sher	ry Wu	Cornell University	Formal Fibers of Integral Domains
3:34-3:49 Nath	naniel Watson	Washington University	Formal Fibers and Power Series Rings
3:51-4:06 Bria	n Simanek	Williams College	Semi-local Generic Formal Fibers
4:08-4:23 Jame	es Godzik	Univ. of California, Berkeley	Colorability of Paradromic Rings
4:25-4:40 Nich	olas Johnson	Augustana College	The Dodecahedron and A5
4:42–4:57 Sam	uel Kolins	Bowdoin College	Spans of the Derivatives of Polynomials
MAA #8		Cochiti Room	Friday August 5
	1 0 11		•
	nolas Croll	Sam Houston State University	Generalizing Identities for Sine and Cosine
	Fujita h Gaadaastan	University of Florida	Robots on Trees
	h Goodpaster	Augustana College	Controlling the Dimension of a Fractal
	ph Kolenick issa Mauck	Youngstown State University	Mathematical Monthly Problem 11103
		Sam Houston State University	The Spiral of Roots
	mdi Oparanozie g Nicholas	Sam Houston State University New Mexico Tech	Koch and the Koch Snowflake Fractional Iterates of Maps
4.42–4.37 Clai	g Menoras	New Mexico Tech	Tractional heraies of maps
MAA #9		Picuris Room	Friday August 5
3:00–3:15 Kim	berly Conner	Mercer University	Student Retention of Calculus Techniques
3:20-3:35 Sara	h Fritsch	Sam Houston State University	The Life and Work of Georg Cantor
3:40-3:55 Jenn	y Buontempo	St. Peter's College	Tableaux Cycling and Catalan Numbers
4:00–4:15 Benj	jamin Mitchell	Taos High School	Hyper-logarithmic & -exponential Functions
4:20–4:35 Chri	s Smith	Grand Valley State University	The Wilf-Zeilberger (WZ) Algorithm
4:40–4:55 Mau	ricio Rivas	Sam Houston State University	Extending Means to n Variables
MAA #10		Santa Ana Room	Friday August 5
3:00–3:15 Jessi	ica Bauman	Tufts University	Outer Space and Metric Graphs
	nolas Yates	Williams College	Irrational Numbers and Equivalence
	othy Trujillo	New Mexico Institute	J. C. Sprott's Simple Chaotic Flows
	n From	Central College	A Problem Related to Sendov's Conjecture
	e Gell-Redman	Columbia University	Equivalent Irrational Numbers
	lsey Webster	Western Oregon University	Pictionary and Markov Chains
Eme		Jacob Grand Grand Grand	2 TOTTO TOTTO TITO TO CITOTION