

Friday, August 28th

12:00nn - 1:45pm

Registration & Welcome

12:00nn MW 154	Registration: Conference Room MW 154 across from reception desk of Math Tower (231 W 18 th Ave)
12:00nn MW 724	Refreshments: 7 th Floor Lounge (MW 724) of Math Tower
1:10pm MW 724	Welcome Address: by (TBA)

1:45pm - 3:15pm

Student Talks (I)

Session: I-A Room: EA 265 Chair: Prof Elizabeth Arnold	
1:45pm EA 265	The Steiner Problem on Surfaces of Revolution Ryan Jensen <i>Brigham Young University</i>
2:15pm EA 265	Triangulations of n-gons and their corresponding monomial ideals Jessica M. Glover <i>Mount Holyoke College</i>
2:45pm EA 265	The first coefficient of the Conway polynomial Jeffrey W Lindquist <i>The Ohio State University</i>

Session: I-B Room: EA 275 Chair: Prof Jim Fowler	
1:45pm EA 275	Greedy Algorithms for Generalized k-Rankings of Paths Andrew N Zemke <i>RIT</i>
2:15pm EA 275	Beautifully Ordered Balanced Incomplete Block Designs Hau Chan <i>College of Charleston</i>
2:45pm EA 275	Reconstruction of a Family of Seperable Graphs Hannah R Kolb <i>University of Nebraska-Lincoln</i>

Session: I-C Room: EA 285 Chair: Prof Sergei Chmutov	
1:45pm EA 285	Relative Tutte polynomial and virtual links Yishun Dong <i>OSU</i>
2:15pm EA 285	Multivariate Tutte polynomial of graphs and HOMFLYPT polynomial of links. Robert M. Bradford <i>Ohio State</i>
2:45pm EA 285	Rook Polynomials in Three Dimensions Nicholas B Krzywonos <i>Grand Valley State University</i>

3:15pm - 3:45pm

Coffee & Cookies in MW 724

Short break, registration in MW 154

3:45pm - 4:45pm

Student Talks (II)

Session: I-A Room: EA 265 Chair: Prof Steven Miller	
3:45pm EA 265	Zeta Functions of Graph Sequences Mollie E Stein <i>Canisius College</i>
4:15pm EA 265	A Census of Two Dimensional Toric Codes over Galois Fields of Sizes 7, 8, and 9 Alejandro U Carbonara <i>Berkeley</i>

Session: I-B Room: EA 275 Chair: Prof Neal Stoltzfus	
3:45pm EA 275	The Relative Class Number for Real Quadratic Feilds Amanda Furness <i>Mount Holyoke University</i>
4:15pm EA 275	Perfect state transfer, integral circulants, and join of graphs Matthew C. Russell <i>Clarkson University</i>

Session: I-C Room: EA 285 Chair: Prof Sergei Chmutov	
3:45pm EA 285	The Conjugacy Classes of $SO(5, F_p)$ Benjamin L Kornacki <i>University of Michigan</i>
4:15pm EA 285	Stochastic difference equation with dependent coefficients Diana Hay & Vivek Hirpara <i>Iowa State University</i>

5:10pm - 6:10pm

Plenary Talk

5:10pm EA 160	Finding stability in chaos Laura DeMarco <i>University of Illinois at Chicago</i>
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6:30pm - 9:30pm

Dinner at the Faculty Club

Introduction of graduate school representatives (see Sunday morning below)

Saturday, August 29th

8:30am - 10:00am

Breakfast in MW 724

Set up of Posters in MW 724

10:00am - 11:00am

Plenary Talk

10:00am EA 160	Diophantine Analysis of Apollonian Packings Peter Sarnak <i>Princeton University & I.A.S.</i>
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11:00pm - 12:30nn

Posters Presentations

Room: MW 724	
Visualizing Algebraic Surfaces Jennifer E Bonsangue <i>CSU Channel Islands</i>	
Sudoku, Shidoku, and...Gröbner Bases?: An Algebraic Approach To Counting Boards Matthew J Menickelly & Katharina M Carella <i>James Madison University</i>	
Algorithmic Game Theory: Selfish Set Packing Jamie Quadri & Sam Cole <i>Oberlin College</i>	
Laplacians on the Airplane, Basilica in Rabbit and Dendrite Julia Sets Chu Yue (Stella) Dong <i>Cornell University</i>	
Computing the number of complete Sperner families of linear chromatic number 2 Maxwell S Forlini <i>Miami University</i>	
Extensions of the Heisenberg Group Laura E Janssen <i>Canisius College</i>	
Self-Contact in Three Branch Planar Fractal Trees Heather A McLendon <i>Ithaca College</i>	
Asymptotics for Class Numbers and Strict Class Numbers for Fundamental Discriminants Hudson Harper & Katherine R Poulsen <i>Mount Holyoke College</i>	
Self-Contact in Ternary Planar Fractal Trees Bolanle O Salaam <i>Ithaca College</i>	
Discrete Complex Analysis Joseph W Seaborn III <i>Taylor University</i>	
Characterizing Inscriptible Polyhedral Graphs Giang T.H. Tran & William Vickery <i>Bard College</i>	

<p>A systematic census of generalized toric codes over F_4, F_5, F_{16} Brian M Vega & James E Amaya <i>UC Berkeley</i></p>
<p>Selfish Set Covering Elara Willett & David Leibovic <i>Oberlin College</i></p>
<p>Taking Curvature to the Extreme! Lindsay M. Willett <i>Hope College</i></p>
<p>Constant Curvature Curves on Polyhedra Leah Wolberg <i>Indiana University</i></p>
<p>Spectral Theory of Mêlé Graphs Michelle T Zagardo & Casey L McKnight <i>University of Wyoming</i></p>

12:30nn - 1:15pm

Lunch Break in MW 724

Lunch boxes provided.

1:15pm - 2:45pm

Student Talks (III)

Session: III-A Room: EA 265 Chair: Prof Elizabeth Arnold	
1:15pm EA 265	The Finite Weyl Group of Type B_n as the Automorphisms of the n-Cube: Isomorphism and Conjugacy David D Chen <i>University of Georgia</i>
1:45pm EA 265	(0,2)-graphs From Roots Systems Using Tableaux Alexander C Garver <i>University of Georgia</i>
2:15pm EA 265	Factorial and Noetherian Subrings of Power Series Rings Damek Davis <i>University of California, Irvine</i>

Session: III-B Room: EA 275 Chair: Prof Jeff Selden	
1:15pm EA 275	Isoperimetric Regions in Planar Sectors with Density r^p Sean P Howe <i>Williams College</i>
1:45pm EA 275	Isoperimetric Inequalities for Wave Fronts and Menzin's Conjecture on Surfaces of Constant Curvature Valentin Zakharevich & Sean Howe <i>Penn State University REU</i>
2:15pm EA 275	Joint Dilation Wavelet Set Zhiwei Wu <i>Texas A&M University</i>

Session: III-C Room: EA 285 Chair: Prof Zahava Wilstein	
1:15pm EA 285	Towards an "average" version of Birch and Swinnerton-Dyer John W Goes <i>Williams College</i>
1:45pm EA 285	2-Selmer groups of quadratic twists of elliptic curves George A Boxer & Peter Z Diao <i>University of Wisconsin, Madison</i>
2:15pm EA 285	Effective nonvanishing of canonical Hecke L-functions Peter Z Diao & George A Boxer <i>University of Wisconsin</i>

2:45pm - 3:45pm

Coffee & Refreshments in MW 724

Discussion break, poster displays, fruit & cheese

3:45pm - 4:45pm

Student Talks (IV)

Session: IV-A Room: EA 265 Chair: Prof Neal Stoltzfus	
3:45pm EA 265	Categorification of Krushkal's Polynomial Sam E Calisch <i>Louisiana State University</i>
4:15pm EA 265	Low-Lying Zeros of Number Field L-functions Ryan N Peckner <i>Williams College</i>

Session: IV-B Room: EA 275 Chair: Prof Christino Tamon	
3:45pm EA 275	Homotopy Classes of Linear 3-Fields on the 3-Sphere Lauren R. McGough <i>MIT</i>
4:15pm EA 275	Positive Hankel Matrices are Sums of Squares Ali Gokal & Kailee A Gray <i>University of Iowa</i>

Session: IV-C Room: EA 285 Chair: Prof Tom Kennedy	
3:45pm EA 285	Conjectures on Twisted Kloosterman Sums Anastassia Etropolski <i>University of Wisconsin - Madison</i>
4:15pm EA 285	The Exponential and Worpitzky Series Modulo p James E Pascoe <i>CSU Chico</i>
4:30pm EA 285	On the Maximum Number of Isosceles Right Triangles in a Finite Point Set David B Roberts <i>California State Univ., Northridge</i>

5:05pm - 6:05pm

Plenary Talk

5:05pm
EA 160 **You can't hear the shape of a drum**
Carolyn Gordon
Dartmouth College

6:30pm - 9:30pm

Dinner at the Fawcett Center

Shuttles from department, group photo.

Sunday, August 30th

8:30am - 10:45am

Breakfasts & Discussions

8:30am MW 724	Breakfast for everyone in 7 th floor lounge.
8:30am Blackwell	Mentor Breakfast: at the The Blackwell Inn Chaired by TBA.
9:15am MW 724	Graduate School Orientation: at the 7 th floor lounge. Question and Answer session on graduate schools, moderated by [TBA], with representatives from following institutions: <ul style="list-style-type: none"> ■ University of Chicago: Jim Fowler ■ University of Arizona: Tom Kennedy ■ U.I.U.C.: Bob Muncaster ■ Lehigh University: Juan Ortiz ■ M.I.T.: Amanda Redlich ■ Iowa State University: Alexander Roitershtein ■ Louisiana State University: Neal Stoltzfus ■ University of Nebraska Lincoln: Zahava Wilstein ■ Ohio State University: James Cogdell

10:45am - 12:45pm

Student Talks (V)

Session: V-A Room: EA 265 Chair: Prof Steven Miller	
10:45am EA 265	New Bounds on Some Ramsey Numbers Daniel E Leven & Kevin M Black <i>Rochester Institute of Technology</i>
11:15am EA 265	Non-Hermitian Hamiltonians William A Karr <i>Indiana University-Purdue University Indianapolis</i>

YMC 2009 Schedule

11:45am EA 265	C^*-algebras of Graph Products Ann K Johnston & Andrew S Reynolds <i>Canisius College</i>
12:15pm EA 265	The Dynamics of an Ammann Aperiodic Protoset Vivian Olsiewski Healey <i>Notre Dame</i>

Session: V-B Room: EA 275 Chair: Prof Arlo Caine	
10:45am EA 275	Matrices and Tensors of Small Norm Elizabeth M Collins-Wildman & Matthew J Hoffman <i>Kent State University</i>
11:15am EA 275	Description of the space of Cartier boundary divisors on $\bar{M}_{n,1}(A)$ Khoa L Nguyen <i>Rutgers University</i>
11:45am EA 275	Nested Traps in Parity Games Andrey V Grinshpun & Andrei Tarfulea <i>Cornell University</i>
12:15pm EA 275	Manifolds with Density as Quotients of Riemannian Manifolds Nate R Harman <i>Williams College</i>

Session: V-C Room: EA 285 Chair: Prof Feryal Alayont	
10:45am EA 285	Duality Properties of Indicatrices of Knots and their Relationship to Physical Knot Invariants Charmaine J Sia <i>Williams College</i>
11:15am EA 285	The Topology of Spaces of Triads Michael J Catanzaro <i>Wayne State University</i>
11:45am EA 285	Harmonic Maps on Cayley Graphs and Compactification Robert J. Abramovic <i>Canisius College</i>
12:15pm EA 285	Spiraling to My Doom: The Revenge (In 3D!) Kiri E Sunde & Jessalyn G Bolkema <i>Hope College</i>

1:00pm - 1:20pm

Wrap Up Meeting

1:00pm MW 724	Closing Address: by David Goss (Chair of OSU Dept of Math), Awards.
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