

CINDY MARIE PHILLIPS

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EDUCATION

University of Arizona Tucson, AZ • Master's of Science in Mathematics, May 2012

Cumulative GPA: 3.5/4.00

Thesis Topic • A study of the structure of the group of equivariant meromorphic functions on a Riemann surface with an antiholomorphic reflection symmetry.

Georgia Institute of Technology Atlanta, GA • Bachelor's of Science in Applied Mathematics, December 2008

Cumulative GPA: 3.73/4.00

RESEARCH EXPERIENCE

University of Arizona Mathematics Department (August 2010, Present)

Graduate Research

- **Master's Thesis**, Advisor: Doug Pickrell, A study of the structure of the group of equivariant meromorphic functions on a Riemann surface with an antiholomorphic reflection symmetry.

Relevant areas of mathematics: Complex Analysis, Differential Geometry, and Exact Sequences from Algebra.

Possible Applications: Quantum Mechanics.

- **Research Tutorial Group**, Advisor: Andrea Young, Combinatorial Manifolds: Bonnet-Myers Theorem.

Relevant areas of mathematics: Combinatorics and Graph Theory, Differential Geometry, and Algebraic Topology.

Possible Applications: Computer Graphics, Triangulations, Graphs, and Nodes.

Georgia Institute of Technology (2007, 2008)

Undergraduate Research

- **Complex Hyperbolic Geometry Research**, Advisor: Igor Belegardek, Complex Hyperbolic Plane in Cylindrical Coordinates about the Hyperbolic Plane.

Relevant areas of mathematics: Hyperbolic Geometry, Matrix Groups, and Complex Analysis.

Possible Applications: Physics.

- **Math and Music Research**, Advisor: Tom Morley, Created Mathematica program capable of producing Irish Jigs based on data of actual Irish Jigs using Markov Chains.

Relevant areas of mathematics: Stochastic Processes (Markov Chains).

Possible Applications: Music, Markov Chain Processes, Programming.

COMPUTER SKILLS

- \LaTeX , Word, Excel, PowerPoint.
- Some Experience with Python, Java, Mathematica, MatLab, Beamer.
- Geometric Algorithms-Course In Progress

EXPERIENCES

- Instructor of Calculus I Fall 2011, College Algebra Spring 2010 and Fall 2010.
Super TA for Introduction to Proofs course Spring 2011.
Team TA College Algebra Fall 2009
(University of Arizona).
- Recitation Section TA for Calculus I multiple times (Georgia Tech).
- Tutored students of a various ages and skill levels privately and through colleges, high schools, middle schools, and Mathnasium of Marana.
- Substituted for Middle School Mathematics classrooms.
- Math Teaching Assistant for Johns Hopkins University's Center for Talented Youth (CTY) Program.
- Office Assistant for a State Farm Insurance Agent, May 2006-July 2006.
- Organizing Team Member for Georgia Tech High School Mathematics Competition 2006, 2007, 2008
- Co-Founder, President, and Vice President of Club Math at Georgia Tech
- Participated in Park City Math Institute Summer 2008