

# Bridget D. Franklin

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CONTACT INFORMATION	Department of Mathematics Rice University 6100 S Main St – MS 136 Houston, TX 77005	(785) 633-8219 bridget.franklin@rice.edu <a href="http://math.rice.edu/~bf2/">http://math.rice.edu/~bf2/</a>
EDUCATION	<b>Rice University</b> , Houston, TX USA  Ph.D., Mathematics (expected graduation date: May 2012)  M.A., Mathematics, December 2009  <b>University of Kansas</b> , Lawrence, KS USA  B.S., Mathematics, May 2007 <ul style="list-style-type: none"><li>• With departmental honors in mathematics and university honors</li><li>• Minor in French Language</li></ul>	
AWARDS	Rice University <ul style="list-style-type: none"><li>• Nettie S. Autry Fellowship, 2010-2011</li></ul> National Science Foundation <ul style="list-style-type: none"><li>• Graduate Research Fellowship Honorable Mention, 2008</li></ul> University of Kansas <ul style="list-style-type: none"><li>• Black-Babcock Mathematics Scholarship, 2006</li><li>• Watkins-Berger Scholarship for undergraduate study, 2003-2007</li><li>• Dean's Scholar's Program, recognizes outstanding underrepresented students for graduate study, 2005-2007</li><li>• Honors Program, 2003-2007</li><li>• Departmental Honors, Department of Mathematics, 2007</li></ul>	
INVITED ADDRESSES	"The effect of infecting curves on knot concordance." Knot Concordance and Homology Cobordism Workshop, Wesleyan University. July 20, 2010.  "The effect of infecting curves on knot concordance." AMS Western Sectional Meetings, University of Nevada, Las Vegas. May 1, 2011.	
PAPERS	Cochran, T., Franklin, B., Hedden, M., Horn, D. "Knot concordance and homology cobordism". Submitted 2011. arXiv:1102.5730v1  Franklin, B. "The effect of infecting curves on knot concordance". Submitted 2011. arXiv:1103.0254v1  Franklin, B., Sam, S. "The nonexistence of cyclic difference sets". 2006.	
TEACHING EXPERIENCE	<b>Rice University</b> , Houston, TX  <i>Teaching Assistant</i>  • Instructor for Math 102: Single Variable Calculus II, Summer 2011. • Teaching Assistant for Math 540: Algebraic Topology, Spring 2011. • Teaching Assistant for Math 365: Linear Algebra, Fall 2010	<b>August 2007 to May 2010</b>

- Grader for Math 300: Topics in Undergraduate Math: Real Analysis, Spring 2010.
- Instructor for Math 101: Single Variable Calculus I, Fall 2009.
- Teaching Assistant for Math 211: Ordinary Differential Equations and Linear Algebra, Fall 2008.
- Teaching Assistant for Math 212: Multivariable Calculus, Spring 2008.
- Teaching Assistant for Math 102: Single Variable Calculus II, Fall 2007.

*Program Instructor*

**Summer 2008, 2009, 2010, 2011**

- **Rice University Mathematical Institute for Young Women**
  - Worked with incoming high school sophomore and junior women in this two week summer school in Knot Theory.
  - Co-ran a seminar on mathematical and knot theoretic games throughout the institute.
  - Assisted program coordinators in the planning and execution of daily activities throughout the program.

**University of Kansas**, Lawrence, KS

*Teaching Assistant*

**August 2004 to May 2007**

- Instructor for Math 101: College Algebra, Spring 2006, Fall 2006, Spring 2007.
- Instructor for Math 002: Remedial Algebra, Fall 2004, Spring 2005 (2 sections), Fall 2005.

*Tutor – Supportive Education Services*

**May 2006 to May 2007**

SERVICE

*Graduate Student Association*, Rice University, 2008 to 2010

- Vice President of Internal Affairs, 2009.
- Department Representative, Mathematics, 2008 to 2009.

*Association of Women in Mathematics* University of Kansas, 2004 to 2007.

- Treasurer (2004 - 2005)
- Secretary (2005 - 2006)
- Vice President (2006-2007)

*Candidate*, University of Kansas Student Body Vice President, Spring 2006.

*University of Kansas Student Senate*

- Junior/Senior College of Liberal Arts and Sciences Representative (2005-2006)
- Holdover Senator (2006 - 2007)

*Math Club*, University of Kansas, 2005 to 2007.

*Student Environmental Advisory Board*, University of Kansas, 2006 to 2007.

CONFERENCES  
AND WORKSHOPS

AMS Western Sectional Meeting  
(University of Nevada, Las Vegas - Las Vegas, NV), Apr 2011.

AMS-MAA Joint Mathematics Meeting  
(New Orleans), Jan 2011.

Knot Concordance and Homology Cobordism Workshop  
(Wesleyan University - Middletown, CT), July 2010

Eighth Annual Graduate Student Topology and Geometry Conference  
(University of Michigan - Ann Arbor, MI), April 2010

- Research Workshop: Homology Theories of Knots and Links  
(Mathematical Sciences Research Institute - Berkeley, CA), Mar 2010
- Introductory Workshop: Homology Theories of Knots and Links  
(Mathematical Sciences Research Institute - Berkeley, CA), Jan 2010
- First National Forum for Young Topologists  
(Tulane University - New Orleans LA), Nov 2009.
- MSRI Summer Graduate Workshop: Symplectic and Contact Geometry and Topology  
(Mathematical Sciences Research Institute - Berkeley, CA), Aug 2009.
- Georgia International Topology Conference  
(University of Georgia - Athens, GA), May 2009
- Summer Graduate Workshop: More Examples of Groups  
(The Ohio State University - Columbus, OH), May 2009.
- Louisiana Texas Topology Retreat  
(Rice University - Houston, TX), Feb 2008.
- Nebraska Conference for Undergraduate Women in Mathematics  
(University of Nebraska - Lincoln, NE), Feb 2007
- Poster: “The Nonexistence of Cyclic Difference Sets”
- AMS-MAA Joint Mathematics Meeting  
(New Orleans), Jan 2007.
- Presented: “The Nonexistence of Cyclic Difference Sets” with Steven Sam.
  - Poster: “The Nonexistence of Cyclic Difference Sets” with Steven Sam.
- Young Mathematicians Institute  
(The Ohio State University - Columbus, OH), Aug 2007
- Presented: “The Nonexistence of Cyclic Difference Sets”