Amanda R. Curtis

EDUCATION:

MA in Mathematics
University of California, Santa Barbara, June 2013

BA in Mathematics (cum laude)
Wellesley College, May 2011. Major: Mathematics; Minor: Eastern Religion

PUBLICATIONS:

MA in Mathematics
University of California, Santa Barbara, June 2013

BA in Mathematics (cum laude)
Wellesley College, May 2011. Major: Mathematics; Minor: Eastern Religion

AWARDS AND NOMINATIONS:

Nominated for UC Santa Barbara's GSA Excellence in Teaching Award, March 2013

Martha Davenport Heard Department Award 2011, Wellesley College Mathematics Department (for academic achievement and contribution to the life of the department)

MAA Poster Session 2011 Prize Winner, at Joint Mathematical Meetings (National Meeting) (Jan 2011)

Outstanding Undergraduate Research Presentation -MAA MathFest 2010 (National Meeting) (Aug 2010)

Massachusetts Space Grant (Summer 2008)

International Baccalaureate Diploma (July 2007)

EMPLOYMENT AND EXPERIENCES:

Graduate Teaching Associate/Instructor of Record, UCSB Mathematics Department (Summer 2014, 2013). Differential calculus for humanities and social sciences.

Graduate Teaching Assistant, UCSB Mathematics Department (Fall 2012-Present). Integral calculus for math, science and engineering majors, differential calculus for non-majors, differential equations, linear algebra, Fourier series and PDE's, introduction to proofs; includes summer teaching in 2012. One quarter of calculus was taught using inquiry based methods.

Research Assistant, Wellesley College Mathematics Department (Summer 2011). Worked on classifying annihilator-ideal graphs for finite commutative rings. A resulting paper has been submitted. Funded by the Brachman Hoffman Fellowship. Worked with peer Jane Rieck.

Supplemental Instruction Leader, Wellesley College Mathematics Department/PLTC (2009-2010). Attended class, planned and held review sessions for students on recent material twice a week for calculus II (2 semesters) and multivariable calculus (1 semester).

Research Experience for Undergraduates at Brigham Young University, NSF and Brigham Young University (Summer 2010). Participated in research related to minimal surfaces and planar harmonic mappings. Program included research, presentations by invited speakers, presentation practice and documenting our research. After Dr. Dorff (advisor) reviews our paper, we plan to submit to a refereed research journal in late 2011.

Grader and Tutor, Wellesley College Mathematics Department (2008, 2010, 2011). Graded for Calculus 1 (Fall 2008) and Abstract Algebra (Spring 2010, Spring 2011) and worked in the mathhelp room, providing tutoring for calculus I and II, multivariable calculus, and abstract algebra (3 semesters).

Lab Assistant, Wellesley College Astronomy Department (2008-2010). Helped the lab instructor set-up and and clean-up from astronomy labs, assisted students with the lab material, operated telescopes and relevant software (4 semesters).

Carleton College Summer Mathematics Program for Women, NSF funded (Summer 2009). Participated in a program focusing on mentoring women in mathematics and preparation for women in mathematics, included classes, presentations by guest speakers, SMPosium conference and practice with presentation skills.

Research Assistant, Wellesley College Astronomy Department (Summer 2008). Worked with other students under Professor Richard French to investigate the dynamics/gravitational processes in Saturn's rings using data from NASA's Cassini satellite. Funded with Massachusetts Space Grant.

Private Tutor, Wellesley, Massachusetts (2009-2011) Tutored high school students in the area in precalculus and high school algebra (3 semesters).

SKILLS:

Mathematical expertise Diagrammatic and Planar Algebras, Low-Dimensional Topology, Linear Algebra, Complex and real analysis, Abstract Algebra

Programming experience IDL, LaTex, JavaScript, IRAF, SAGE

TALKS:

UCSB Discrete Geometry and Combinatorics Seminar (February 2015) Jones-Wenzl Projectors for the Temperly-Lieb Algebra

Graduate Education and Mentoring Workshop (January 2015) An Introduction to Topological Quantum Computing

UCSB Graduate Topology Seminar (February 2013) Topology In Economics

WiMSoCal 2012 (Mathematics Conference for Women in Southern California) Classifying annihilator-ideal graphs of finite commutative rings

Joint Mathematical Meetings 2012: Boston (January 2012) Classifying annihilator-ideal graphs of finite commutative rings

Wellesley Ruhlman 2011 (Wellesley College Annual Research Conference) Presented the results of a small group study (with Jane Rieck) on annihilator ideal graphs for finite commutative rings to a non-mathematical audience.

Poster Session at the Joint Mathematical Meetings Joint poster presentation on minimal surfaces and planar harmonic mappings with Rachel Messick, BYU.

Smith WIMIN 10 (Women in mathematics in New England) (Sept 2010) Minimal Surfaces and Planar Harmonic Mappings

MAA MathFest 2010, Pittsburgh, Pa (August 6th, 2010) Minimal Surfaces and Planar Harmonic Mappings- Joint talk with Rachel Messick, Brigham Young University (Advisor: Dr. Michael Dorff Brigham Young University)

Northeastern Section of the MAA, Bentley University (Nov 2008) Tessellations of the Poincare Disk (Advisor: Professor Stanley Chang)

KECK Northeastern Astronomy Consortium, Wesleyan University (Nov 2008)The Significance of Star Position Uncertainties During Stellar Occultations

Wellesley Math Student Seminar: Minimal Surfaces and Planar Harmonic Mappings (2010), The Gamma Function- with Jane Rieck (2010), Quotients of Polynomial Rings (2009), Bernoulli Numbers (2009), Hyperbolic Geometry (2008), Linear Algebra and Disease Spread (2008)

CONFERENCES ATTENDED:

Joint Mathematical Meetings 2011, 2012, 2013, 2015

WiMSoCal '11, '12

Smith WIMIN '08, 10

MAA Mathfest 2010 (Aug 2010)

SMPosium (Summer Math Program for Women at Carleton College) (July 2009)

Brown SUMS 09 (March 2009)

Northeastern Section of the MAA, Bentley University (Nov 2008)

KECK Northeastern Astronomy Consortium, Wesleyan University (Nov 2008)