# Curriculum Vita

## John Bergschneider

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#### **EDUCATION**

Ph.D. in Pure Mathematics

Expected graduation Spring 2020

Florida State University, Tallahassee Thesis Advisor: Wolfgang Heil

**B.S** in Mathematics

May 2014

Florida State University, Tallahassee

#### RESEARCH INTERESTS

- Geometric Topology
- Low Dimensional Topology
- Morse Theory

## SCHOLARSHIPS & AWARDS

• Distinguished Teaching Assistant Recognition Award

April 2019

• 3rd Place in Graduate Student Research Week Poster Competition

April 2019

• Qian Endowment for Excellence Travel Support

November 2018

• FSU Dean's Scholarship

Fall 2016 - Fall 2019

• Bright Futures Scholarship

2010-2014

## **PAPERS**

- J. Bergschneider, Classifying Trivalent 2-Stratifolds with Finite Fundamental group (In Preparation)
- J. Bergschneider, Graphs of 2-Stratifolds (Dissertation)

## TEACHING EXPERIENCE

## Instructor of record for Calculus III (MAC 2313)

Fall 2018, Fall 2019

- Lectured four times a week
- Prepared and provided lecture notes to students
- Wrote, administered, and graded tests, quizzes, and practice worksheets
- Provided assistance to students during office hours and review sessions

#### Instructor of record for Linear Algebra (MAS 3105)

Spring 2019, Summer 2019

- Lectured four times a week
- Prepared and provided lecture notes to students
- Wrote, administered, and graded tests, quizzes, and practice worksheets
- Provided assistance to students during office hours and review sessions

#### Instructor of record for Calculus I (MAC 2311)

Spring 2018, Summer 2018

• Lectured three to four times a week

- Prepared and provided lecture notes to students
- Wrote, administered, and graded tests, quizzes
- Provided assistance to students during office hours

## Instructor of record for Precalculus (MAC 1140)

Spring 2017, Fall 2017

- Lectured three times a week and held a recitation session once a week
- Prepared and provided lecture notes to students
- Assigned and graded homework
- Proctored quizzes and tests
- Provided additional assistance to students during office hours and help sessions

## Teaching Assistant

Fall 2016, Summer 2016, Summer 2017

- Courses: College Algebra, Liberal Arts Math, Trigonometry, Precalculus, Business Calculus.
- Managed weekly lab sections
- Provided additional assistance to students during office hours.
- Helped students in study sessions. Proctored quizzes and tests.

#### INVITED TALKS & POSTERS

Talk: Classifying Stratified Spaces: 2-Foams and 2-Stratifolds

January 2020

Special Session on Self-Distributive Structures, Knot Theory, and the Yang-Baxter Equation Joint Mathematics Meeting, Denver, CO.

Talk: Classifying Trivalent 2-Stratifolds with Finite Fundamental Group

June 2019

Graduate Student Conference in Algebra, Geometry, and Topology

Temple University, Philadelphia, PA.

Poster: 2-Stratifolds

November 2018

Texas Geometry and Topology Conference

Rice University, Houston, TX.

#### TALKS & POSTERS

**Talk:** Trivalent 2-Stratifolds

November 2019

Topology and Geometry Seminar

Florida State University, Tallahassee, FL.

Talk: Genus 1 Heegard Splittings of Lens Spaces

September 2019

Graduate Student Seminar

Florida State University, Tallahassee, FL.

Talk: Some Examples from Knot Theory

June 2019

Graduate Student Seminar

Florida State University, Tallahassee, FL.

Flash Talk: Classifying Trivalent 2-Stratifolds with

April 2019

Finite Fundamental Group

Mathematics Graduate Student Research Week

Florida State University, Tallahassee, FL.

Poster: Detecting Simply Connected 2-Stratifolds

Mathematics Graduate Student Research Week

Florida State University, Tallahassee, FL.

April 2019

**Talk:** Finite 2-Stratifold Groups February 2019 Topology and Geometry Seminar Florida State University, Tallahassee, FL. Talk: 2-Stratifolds October 2018 Topology and Geometry Seminar Florida State University, Tallahassee, FL. Talk: Fundamental Groups of 3-Manifolds with Real Projective Plane Category 2 March 2018 Topology and Geometry Seminar Florida State University, Tallahassee, FL. **Talk:** 3-Manifolds with K-Category 2 and Graph Groups October 2017 Graduate Student Seminar Florida State University, Tallahassee, FL. **Talk:** On K-Category of 3-manifolds for K a Pseudo-Projective Plane or a 1-sphere wedge a 2-sphere June 2017 Candidacy Exam Florida State University, Tallahassee, FL. Talk: K-Contractible Sets and Group Contractible Sets in 3-Manifolds April 2017 Topology and Geometry Seminar Florida State University, Tallahassee, FL. **Talk:** Fiber Bundles and K-Category for 3-Manifolds October 2016 Topology and Geometry Seminar Florida State University, Tallahassee, FL. **CONFERENCES** Tech Topology Conference December 2019 Georgia Tech Atlanta, GA. Georgia Topology Conference May 2019 University of Georgia Athens, GA. UF/FSU Topology and Geometry Meeting February 2019 Florida State University Tallahassee, FL. Tech Topology Conference December 2018 Georgia Tech Atlanta, GA. Texas Geometry and Topology Conference November 2018 Rice University Houston, TX. Tech Topology Conference December 2017 Georgia Tech Atlanta, GA.

AMS Fall Southeastern Sectional Meeting

September 2017

University of Central Florida

Orlando, FL.

UF/FSU Topology Conference

University of Florida Gainesville, FL. February 2017

## LEADERSHIP, SERVICE, & OUTREACH

Co-organizer for Graduate Student Seminar	Fall 2019
Mentor, AWM FSU Student Chapter	September 2019 – Present
Prospective Graduate Student Liaison	Fall 2018 – Present
FSU High School Math Contest Grader	November 2017
Graduate Student Council	August 2018 – Present
Volunteer, FSU Math at Tallahassee Science Festival	September 2016
Incoming Graduate Student Liaison	2015-Present
Volunteer, Annual FSU Math Fun Day	2014-Present

## CERTIFICATIONS AND TRAINING

Canvas Training — FSU Math Department	2018
MyMathLab Training — FSU Math Department	2018
FSU PIE Teaching Training Recognition	2016
FSU Advanced PIE Teaching Training Recognition	2016
TA Class and Supervised Teaching — FSU Math Department	2016

## PROFESSIONAL ORGANIZATIONS

Pi Mu Epsilon	2017 - Present
Association for Women in Mathematics	2016 - Present
American Mathematical Society	$2014-{ m Present}$

#### TECHNICAL SKILLS

Programming Language: C++, Python, Django, CSS, HTML

Mathematical Software: Mathematica, LATEX

Microsoft Works: Excel, Powerpoint

Educational Software: MyMathLab, WebAssign, Blackboard, Canvas

## **LANGUAGES**

English: Native Speaker

**Spanish:** Intermediate Knowledge **French:** Basic Reading Knowledge