

Justin Bryant

Wesleyan University
Department of Mathematics and Computer Science
☎ (253) 722 7343
✉ jabryant@wesleyan.edu
🔗 <https://jabryant.research.wesleyan.edu/>

Education

2017 – **Wesleyan University, Middletown, CT**
PhD Candidate in Mathematics
Advisor: Constance Leidy

2014 – 2017 **Seattle University, Seattle, WA**
Bachelor of Science in Mathematics
Degree Honors: Magna Cum Laude

Research Interests

My research interests are in knot theory and low-dimensional topology. I am particularly interested in concordance and generalized satellite operators.

Teaching Experience

- 2019 – **Instructor, Wesleyan University**
- **Graduate Pedagogy** Fall 2022
This course introduces first year PhD students to different pedagogic approaches and techniques, and considers the ethics of being instructors and researchers.
 - **Elements of Calculus Part I** Fall 2021
Sole instructor for my section. Course materials created in collaboration with faculty mentor and other graduate student instructors.
 - **Elements of Calculus Part I** Fall 2020
Sole instructor for my section. Course materials created in collaboration with faculty mentor and other graduate student instructors.
 - **Elements of Calculus Part I** Fall 2019
Sole instructor for my section. Course materials created in collaboration with faculty mentor and other graduate student instructors.
- 2017 – **Graduate Teaching Assistant, Wesleyan University**
- **Math Workshop Tutor** Fall 2022
Drop-in tutoring for various math course, including: calculus, linear algebra, discrete math, real analysis, abstract algebra, probability theory, and set theory.
 - **Abstract Algebra I** Spring 2022
Held office hours and graded assignments.
 - **Discrete Math** Spring 2022
Held weekly TA sessions and wrote homework solutions.
 - **Discrete Math** Spring 2021
Held virtual office hours and graded assignments.

- › **Real Analysis I**

Typed lecture notes.

› **Real Analysis I**

Held office hours and graded assignments for two asynchronous sections.

› **Abstract Algebra I**

Held TA sessions and graded assignments.

› **Math Workshop Tutor**

Assisted students on assignments through drop-in tutoring for various courses including: calculus, linear algebra, discrete math, real analysis, complex analysis, number theory, and abstract algebra.

› **Real Analysis II**

Held office hours and wrote homework solutions.

Spring 2020

Spring 2019

Fall 2018

Spring 2018

Fall 2017

2015 – 2017 **Math Lab Tutor**, *Seattle University*

Drop-in tutoring for various math courses including: college algebra, quantitative reasoning, statistics, pre-calculus, calculus, linear Algebra, and differential equations.

Talks

- May 2022 **GTA: Philadelphia**, *Temple University*

› A Hedden-Style Conjecture for String Links

April 2022 **JMM**, *virtual conference*

› A Hedden-Style Conjecture for String Links

A recording of the talk is available at the following link:
<https://meetings.ams.org/math/jmm2022/meetingapp.cgi/Paper/7996>

Feb. 2020 **Topology et. al Seminar**, *Wesleyan University*

› The Slice-Ribbon Conjecture

Spring 2022

Fall 2021

Spring 2020

Fall 2019

Spring 2019

Fall 2018
- 2018 – **Graduate Student Seminar**, *Wesleyan University*

› Rational Tangles and 2-Bridge Knots

› A Hedden-Style Conjecture for String Links

› The Slice-Ribbon Conjecture

› The classical (and possibly algebraic) concordance group

› Slice knots and Concordance

› Cyclic Covers and Torsion Invariants

Spring 2022

Fall 2021

Spring 2020

Fall 2019

Spring 2019

Fall 2018

Conferences

- May 2022 **GTA: Philadelphia**, *Temple University*
- April 2022 **Joint Math Meetings**, *virtual conference*
- April 2021 **GSTGC**, *virtual conference*
- May 2020 **Nearly Carbon Neutral Geometry and Topology Conference**, *virtual conference*
- Dec. 2019 **Tech Topology Conference**, *Georgia Tech*
- July 2019 **UnKnot IV**, *University of Washington, Bothell*

Service and Mentorship

- 2021 – **Directed Reading Program Mentor**, *Wesleyan University*
 > Topic: Additivity of Knot Genus Spring 2022
 > Topic: A Partial Order for Knots Spring 2022
 > Topic: Quandle Invariants for Knots Fall 2021
 More information available at: <https://mathcs-graduate.wescreates.wesleyan.edu/drp/>
- 2021 – **Directed Reading Program Co-Organizer**, *Wesleyan University*
 Coordinated mentors, recruited participants, and planned the end of semester symposiums for student projects.
- 2021 – **Graduate Student Seminar Co-Organizer**, *Wesleyan University*
 Oversaw scheduling, food, and announcements for weekly departmental seminar.
- 2021 – **AMS Chapter Secretary**, *Wesleyan University*
 Supported the community and professional development events of the chapter president.
- 2018 – 2020 **AMS Chapter President**, *Wesleyan University*
 Planned and hosted teaching panels, academic career panels, and community events.