CURTISS LYMAN

Department of Mathematics
University of Washington
Seattle, WA 98195-4350

206 963 6991
lymanc@uw.edu
www.google.com/view/curtiss-lyman

Languages: Matlab, Python, Mathematica, SQL

EDUCATION

6/2025 (exp.) **Ph.D., Mathematics** — **University of Washington**
Thesis title: Band Spectrum Singularities for Schödinger Operators
Advisor: Alexis Drouot

6/2019 **M.S., Applied Mathematics** — **University of Washington**

6/2017 **M.S., Mathematics** — **Western Washington University**
Project title: Minimization of Distance, Geodesics, and Conjugate Points
Advisor: Stephen McDowall

6/2012 **B.S., Psychology** — **Tulane University**
Cum Laude Honors – top 30% of graduating class

EXPERIENCE

9/2016 – Present **Instructor** — **University of Washington & Western Washington University**
Courses: **Discrete Mathematical Modeling** (Summer 2024), **Probability Theory** (Summer 2023), **Business Calculus** (Fall 2024, 2023, & 2022), **Business Precalculus** (Spring 2023, 2022 & Summer 2021), **Linear Algebra** (Winter 2024, 2023), **Algebra Qualifying Exam Prep** (Summer 2022, 2021), **Precalculus** (Fall 2016 – Spring 2017).

6/2019 – 9/2019 **Data Science Consultant** — **CoffeeMeetsBagel**
- Used natural language processing to create new metrics for the CoffeeMeetsBagel dating app to ensure that users were matched with people they would have a strong connection with.
- Successfully communicated mathematical and data science concepts to colleagues without mathematical backgrounds.

9/2017 – 6/2022 **Teaching Assistant** — **University of Washington**
Courses: **Graduate Algebra I – III** (Fall 2020-Spring 2022), **Scientific Computing** (Spring 2020), **Calculus I – III** (Fall 2017 – Winter 2020).

3/2024 – 6/2024 **Washington Directed Reading Program Mentor** — **University of Washington**
Mathematics of Quantum Mechanics
Mentees: Amelie Martin & Erik Vank

2014 – 2015 **Manager of District Workforce Initiatives** — **Seattle Colleges**
- Applied for and was awarded grants up to $250,000 for the development of programs and curriculum designed to help adults re-entering college or the workforce.
- Coordinated with representatives from all four Seattle Community Colleges to ensure the effective implementation of these programs.

RESEARCH

Interests: Partial differential equations in condensed matter physics, such as the study of waves in quantum materials. My work often employs techniques from representation theory, complex analysis, and spectral theory.

Publications: *Band Spectrum Singularities for Schödinger Operators* (Alexis Drouot, **L.**, 2024). [Preprint]. `https://arxiv.org/abs/2410.02092`

ACCOMPLISHMENTS

10/2024 **Steve Mitchell Graduate Fellowship for the Love of Math** — **University of Washington**
Awarded for excellence in teaching and a clear demonstration of a love for mathematics.

10/2024 **Walter J. Michaelis Graduate Fellowship in Mathematics** — **University of Washington**
Awarded for excellence in research.

6/2017 **Outstanding Graduate for the Math Department** — **Western Washington University**
Awarded to a single graduate from the department for outstanding performance.

7/2015 – 6/2017 **Elias Bond & Richard Greene Scholarships** — **Western Washington University**
Merit based scholarships for academics.

9/2008 – 6/2012 **Presidential Scholarship** — **Tulane University**
Merit based scholarship for outstanding academics.

2014 **Staff Member of the Year** — **Camp Parsons**

2007 **Eagle Scout** — **Troop 375, Burien, WA**

PRESENTATIONS AND PROFESSIONAL DEVELOPMENT

1/2025 **Joint Mathematics Meetings** — **Seattle, WA**
Invited Talk: *Schrödinger Degeneracies of Lattice Potentials*.

9/2023-Present **Graduate Student Analysis Seminar** — **University of Washington**
Invited Talk: *Schrödinger Degeneracies of Cubic Lattice Potentials*, and participant.

8/2024 **Geometric Inverse Problems and Inverse Problems for Elliptic Equations** — **University of California SC**
Summer School.

9/2023-6/2024 **Mathematics of Topological Insulators Research Group** — **University of Washington**
Participant.

9/2022-6/2023 **Noncommutative Algebra Research Group** — **University of Washington**
Participant.