

Nicholas G. Lohr

CONTACT INFORMATION	210A Locy Hall 1850 Campus Dr. Evanston, IL 60208 USA	<i>website:</i> https://math.northwestern.edu/~nlohr/ <i>email:</i> nlohr@math.northwestern.edu
EDUCATION	Northwestern University Ph.D. in Mathematics, Thesis advisors: Jared Wunsch and Steven Zelditch	September 2020 - Summer 2025
	Northwestern University M.S. in Mathematics	September 2019 - September 2020
	University of Notre Dame B.S. in Mathematics with minor in Actuarial Science, <i>magna cum laude</i> Senior thesis advisor: Jeffrey Diller	August 2015 - May 2019
RESEARCH INTERESTS	Analysis of PDE, semiclassical analysis, spectral and scattering theory, mathematical physics and Wigner distributions, harmonic analysis, probability, quantum dynamics.	
RESEARCH	Papers <ul style="list-style-type: none">• <i>On the intertwining map between Coulomb and hyperbolic scattering</i>, submitted September 2024.• <i>Semiclassical measures of eigenfunctions of the hydrogen atom</i>, under revisions for Annales Henri Poincaré.• <i>Scaling asymptotics of Wigner distributions of harmonic oscillator orbital coherent states</i>, Communications in Partial Differential Equations 48(2023), 415-439. Talks <ul style="list-style-type: none">• Northwestern Informal Probability Seminar Northwestern, Fall 2024• Northwestern Undergraduate Math Society Northwestern, Winter 2024• RTG Dynamics REU Northwestern, Summer 2023• 87th Midwest PDE Seminar Notre Dame, Spring 2023• Microlocal Seminar Northwestern, Spring 2023• Graduate Student Seminar Northwestern, Spring and Fall 2021, Fall 2022 Conferences <ul style="list-style-type: none">• Microlocal Analysis and Quantum Dynamics Northwestern, Summer 2024• Paris-Saclay conference in Analysis and PDE Orsay, France, Spring 2024• From Microlocal to Global Analysis MIT, Spring 2024• Oberwolfach Seminar 2347a Oberwolfach, Germany, Fall 2023• 87th Midwest PDE Seminar Notre Dame, Spring 2023• May Midwest Microlocal Meeting Northwestern, Spring 2023	
TEACHING ASSISTING AND GRADING	Northwestern Teaching Assistant Evanston, IL <ul style="list-style-type: none">• Assisted teaching and grading for the following classes<ul style="list-style-type: none">◦ Single-Variable Calculus with Precalculus (MATH 218-3) Spring 2024<ul style="list-style-type: none">– with Sonja Mapes◦ Probability and Stochastic Processes (MATH 310-3)<ul style="list-style-type: none">– with Ursula Porod	Fall 2019 - Spring 2024

- Single-Variable Calculus with Precalculus (MATH 218-2) Winter 2024
 - with Sonja Mapes
- Probability and Stochastic Processes (MATH 310-2)
 - with Keith Burns
- Single-Variable Calculus with Precalculus* (MATH 218-1) Fall 2023
 - with Sonja Mapes
- Single-Variable Calculus with Precalculus (MATH 218-1) Fall 2022
 - with Sonja Mapes
- Probability Theory and Stochastic Analysis (MATH 450-1)
 - with Antonio Auffinger
- MENU Applied Analysis (MATH 360-2) Winter 2022
 - with Eugene Kushnirsky
- Complex Analysis and Group Theory for ISP (MATH 382-0)
 - with Ezra Getzler
- MENU Applied Analysis (MATH 360-1) Fall 2021
 - with Eugene Kushnirsky
- Fourier Analysis and Boundary Value Problems for ISP (MATH 381-0)
 - with Santiago Cañez
- Single-Variable Calculus with Precalculus (MATH 218-2) Spring 2021
 - with Sean McAfee
- MENU Probability and Stochastic Processes (MATH 311-3)
 - with Ursula Porod
- Probability Theory and Stochastic Analysis (MATH 450-3)
 - with Antonio Auffinger
- Sequences and Series (MATH 226-0) Fall 2020
 - with Eric Zaslow
- Elementary Differential Equations (MATH 250-0)
 - with Eric Chang
- Probability and Stochastic Processes[†] (MATH 310-2) Winter 2020
 - with Keith Burns

COMMUNITY
SERVICE

RTG Dynamics REU Advisor Summer 2023
Evanston, IL

- Advised undergraduates biweekly in undertaking and presenting research in Hamiltonian dynamics

Northwestern Directed Reading Program Spring 2021 - Winter 2023
Evanston, IL

- Advised undergraduates in undertaking and presenting independent study projects in mathematics
 - Levi Hoogendoorn - Grace-Heawood theorems Winter 2023
 - Claire Paré - Isoperimetric and isodiametric inequalities
 - Colin Brennan - Lagrange inversion theorem with applications in analysis, algebra, and topology Winter 2022
 - Kole Butterer - Brownian motion and the Dirichlet problem with SageMath visualization Spring 2021

Northwestern Causeway Certificate Program Mentor Summer 2023-Summer 2025

Evanston, IL

- Advised the following post-baccalaureate students in preparing for graduate school

*two sections

[†]only graded

◦ Xzavier Herbert

Northwestern Climate Committee Member

2022-2023

Evanston, IL

- Met quarterly to discuss how to improve graduate students well-being with faculty members

Head Juror of First Degree Murder Trial

Winter 2022

Chicago, IL

- Served jury duty for Cook County and was voted to be the jury's foreperson

**AWARDS AND
GRANTS**

Nominated by Math Department for the University Teaching Award	2024
NSF RTG Dynamics: Classical, Modern, and Quantum Recipient	2022-2023
Department Graduate Student Teaching Assistant Award	2021-2022
NSF RTG: Analysis on Manifolds Recipient	2020-2022
GE Prize for Excellence in Mathematics - Honors	2019
College of Science Summer Undergraduate Research Fellowship	2018
Riverbend Math Center Award for Excellence in Quantitative Analysis	2015
Bayer Physical Science Award for Excellence in Physical Science	2015
Hoosier Science-Engineering Fair Award	2014
Mu Alpha Theta Science Fair Award	2014
University of Notre Dame Mathematics Department Award	2014

**PROGRAMMING
SKILLS**

LaTeX	Proficient ■■■■
Mathematica	Proficient ■■■■
Python/SageMath	Intermediate ■■■■
C++	Elementary ■■■■
Emacs/LISP	Elementary ■■■■
HTML/Javascript	Elementary ■■■■