Elias Hess-Childs

Personal and Contact Information	US/Canadian Citizen 5000 Forbes Ave, WEH 7124 Pittsburgh, PA 15213-3890	Phone Number: (646)-644-6874 Email: ehesschi@andrew.cmu.edu Website: https://www.math.cmu.edu/~ehesschi/	

Academic Positions

Carnegie Mellon University, Dept. of Mathematical Sciences   2024-present
     Postdoctoral Associate

Education

New York University, Courant Institute   2019-2024
     Ph.D. in Mathematics, expected S 2024
     Advisor: Sylvia Serfaty

McGill University
     B.S. in Honours Mathematics, awarded May 2019   2015-2019
     First Class Honours

Publications Preprints

E. Hess-Childs. **Large deviation principles for singular Riesz-type diffusive flows**. Preprint. (submitted 2024)

E. Hess-Childs, K. Rowan. **Higher-order propagation of chaos in L^2 for interacting diffusions**. Preprint. (submitted 2024)

A. Burchard, R. Choksi, E. Hess-Childs. **On the strong attraction limit for a class of nonlocal interaction energies**. Nonlinear Analysis, 198, 111844, 12 (2020)

Honours and Awards

Year	Award	Institution
2024	Kurt O. Friedrichs Prize	New York University
2022-2023	Isaac Barkey and Ernesto Yhap Fellowship	New York University
2021-2024	Alexander Graham Bell CGS-D (Declined)	NSERC
2021-2024	Postgraduate Scholarship-Doctoral	NSERC
2019-2025	Eckhardt Fellowship (Declined)	University of Chicago
2019	Anna and Robert Skomoroski Prize	McGill University
2016-2019	Dean's Honour List	McGill University
2018-2019	Herbert J. Brennen Scholarship	McGill University
2018-2019	Faculty of Science Scholarship	McGill University
2018	Undergraduate Student Research Award	NSERC
2017-2018	Edward Beatty Scholarship in Math	McGill University
2017-2018	Robert Bruce Scholarship	McGill University
2017	Undergraduate Student Research Award	NSERC
2016-2017	Garnet A. Woonton Prize in Physics	McGill University
2016-2017	Faculty of Science Scholarship	McGill University
2015-2016	J W McConnell Scholarship	McGill University

Talks

Higher-order Corrections to Propagation of Chaos for Mean-field Interacting Diffusions. Analysis Research Interaction Team Seminar, Beijing International Center for Mathematical Research. (May 2022).

Higher-order corrections to propagation of chaos for mean-field interacting diffusions. Center for Nonlinear Analysis, Carnegie Mellon University. (March 2024).

Propagation of chaos from the perspective of perturbation theory. 2023 Winter Meeting of the Canadian Mathematical Society. (December 2023)

Large deviation principles for interacting diffusions. Student Probability Seminar, Courant Institute. (September 2023)

Large deviation principles and Hamilton-Jacobi equations. Student Probability Seminar, Courant Institute. (March 2022)

An introduction to Coulomb Gases. Student Probability Seminar, Courant Institute (October 2020)

Nearest neighbour percolation and extensions. Student Probability Seminar, Courant Institute. (February 2020)

Introduction to Spin Glass. Seminars in Undergraduate Mathematics in Montreal. (January 2018)

<u>Teaching</u>	Course Instructor for Differential and Integral Calculus, CMU. (Fall 2024)
	Teaching Assistant for Analysis I, NYU. (Spring 2024)
	Teaching Assistant for Analysis I, NYU. (Spring 2023)
	Teaching Assistant for Probability and Statistics, NYU. (Fall 2022)
	Teaching Assistant for Analysis I, NYU. (Spring 2022)
	Teaching Assistant for the PIMS-CRM Summer School in Probability. (Summer 2021)
<u>Professional Activities</u>	Co-organizer, Courant Student Probability Seminar. (Spring 2020-Spring 2024)
	Co-organizer, Graduate Student/Postdoc Seminar. (AY 2021-2022)
	President, Courant Student Organization. (AY 2021-2022)
	Vice-President, Courant Student Organization. (AY 2020-2021)