

Edward CHERNYSH

CONTACT

ADDRESS: Department of Mathematics and Statistics, McGill University
Burnside Hall, 805 Sherbrooke Street West, Room 1122
Montreal, Quebec H3A 0B9, Canada

WEBSITE: <http://cs.mcgill.ca/~echern2/>

EMAIL: edward.chernysh@mail.mcgill.ca

LANGUAGES: Fluent in English & French.

EDUCATION

Current PhD in Pure Mathematics | McGill University, Montréal, Canada.
Advisors: Professor Jérôme Vétois, Professor Pengfei Guan.

MAY 2020 Master of Science (Thesis) in Pure Mathematics | McGill University, Montréal, Canada.
Advisors: Professor Jérôme Vétois, Professor Pengfei Guan.

APRIL 2018 Bachelor of Science in HONOURS MATHEMATICS
First class honours and distinction, McGill University, Montréal, Canada

PUBLICATIONS AND PREPRINTS

2025 E. Chernysh, *Existence and Multiplicity of Sign-Changing Solutions to Weighted Entire Critical p -Laplace Equations*. Preprint.

2024 E. Chernysh, *A Struwe-type Decomposition Result for Weighted Critical p -Laplace Equations*. Submitted to journal. arXiv:2410.14861.

2021 E. Chernysh, *Weakly Monotone Decreasing Solutions to Elliptic Schrödinger Systems*. Electron. J. Differential Equations, Vol. 2021 (2021), No. 28, pp. 1-11.

SEMINARS AND CONFERENCES

I have given talks at the following:

2025 AMS Spring Eastern Section Meeting | Special Session on Sharp Geometric Inequalities and their Stability, PDEs and Applications.

2023 CMS Winter Meeting | Geometric Analysis Group.

2021 CMS Summer Meeting | Nonlinear Analysis on Manifolds Group.

2023 Geometric Analysis Seminar | MCGILL UNIVERSITY, Montréal, Canada.

2020 Geometric Analysis Seminar | MCGILL UNIVERSITY, Montréal, Canada.

2019 Geometric Analysis Seminar | MCGILL UNIVERSITY, Montréal, Canada.

2017 Geometric Analysis Seminar | MCGILL UNIVERSITY, Montréal, Canada.

2017 Undergraduate Research Conference | MCGILL UNIVERSITY, Canada

Poster Link: <https://cs.mcgill.ca/~echern2/repo/2017poster.pdf>

FUNDING AND AWARDS

SEPT. 2025 – DEC. 2025	ISM Scholarship for Outstanding PhD Students.
FALL 2024	Teaching Assistant Excellence Award – McGill University.
SEPT. 2020 – JAN. 2024.	NSERC Canada Graduate Scholarship Doctoral (CGS D) Award.
WINTER 2020	Teaching Assistant Excellence Award – McGill University.
FALL 2019	Teaching Assistant Excellence Award – McGill University.
FALL 2018	Teaching Assistant Excellence Award – McGill University.
OCT. 2017	2 nd prize at the McGill Undergraduate Research Conference.
MAY 2017	NSERC Undergraduate Student Research Award.
MAY 2016	Science Undergraduate Research Award.

TEACHING EXPERIENCE

At McGill University.

Winter 2025	Teaching assistant for Honours Analysis 2 (Math 255).
Fall 2024	Teaching assistant for Honours Analysis 1 (Math 254).
Winter 2024	Teaching assistant for Honours Analysis 2 (Math 255).
Winter 2023	Teaching assistant for Analysis 2 (Math 243).
Fall 2021	Head Teaching assistant for Calculus (Math 139-140-141).
Fall 2020	Teaching assistant for Honours Analysis 1 (Math 254).
Winter 2020	Teaching assistant for Analysis 2 (Math 243).
Fall 2019	Teaching assistant for Honours Analysis 1 (Math 254).
Fall 2018	Teaching assistant for Honours Analysis 1 (Math 254).

UNDERGRADUATE RESEARCH EXPERIENCE

MAY-DECEMBER 2017	Mathematical Research at MCGILL UNIVERSITY, Montréal, Canada Studied the decay properties of weakly monotone decreasing solutions to elliptic Schrödinger integral systems in $n \geq 3$ dimensions. I also considered existence/non-existence criteria for positive solutions to these systems. The research was supported by a grant from the <i>National Sciences and Engineering Research Council of Canada</i>. Supervisor: Professor Jérôme Vétois.
MAY-AUGUST 2016	Mathematical Research at MCGILL UNIVERSITY, Montréal, Canada After learning the basics of elliptic partial differential operators, I studied the radial geometry of classical solutions to the nonlinear stationary Schrödinger equation in $n \geq 2$ dimensions. Supported by a <i>Science Undergraduate Research Award</i> (SURA). Supervisor: Professor Jérôme Vétois.