Shahriar Aslani

CONTACT INFORMATION	Department of Mathematics, University of Toronto, 40 St. George Street, Toronto, Ontario, Canada M5S 2E4

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  PG Building 307B.
  UTM, Deerfield Hall 3097B.

AFFILIATION

University of Toronto, department of mathematics

Postdoctoral fellow and course instructor.
  Advisor: Ke Zhang

RESEARCH INTERESTS

Hamiltonian dynamics, sub-Riemannian Geometry, Weak KAM theory

EDUCATION

PSL research university, École normale supérieure, département de mathématiques et applications (DMA)

Ph.D. in Mathematics, defended on June 2022

Dissertation Topic: Bumpy metric theorem in the sense of Mañe for non-convex Hamiltonian systems
Advisor: Patrick Bernard

Sharif university of technology, department of mathematical sciences

M.S. in Mathematics, defended on July 2018

Dissertation Topic: Analysis and differential equations on Fractals.
Advisor: Alireza Ranjbar-Motlagh

PUBLICATIONS

Shahriar Aslani, Patrick Bernard, *Bumpy metric theorem in the sense of Mañe for non-convex Hamiltonian systems.* Submitted to the Journal of Modern Dynamics, January 2022.

Shahriar Aslani, Patrick Bernard, *Normal forms near orbit segments of convex Hamiltonian systems.* International Mathematics Research Notices, January 2021.

TALKS

Bumpy metric theorem for contact structures, Université de Montréal, May 2023.

Closed orbits of a Hamiltonian vector field: A perturbation theorem for linearized Poincare maps and its applications , University of Manitoba, February 2023.

Bumpy metric theorem in the sense of Mañé for non-convex Hamiltonians, Jussieu, geometry and topology seminar, January 2022.

Mañé generic properties of non-convex Hamiltonian systems, Ruhr University Bochum, January 2022.

Normal form on orbits of a Hamiltonian vector field and its application in perturbation theorems, working group on Hamiltonian and symplectic dynamics, Jussieu, October

2021.

On Bumpy metric theorem in the sense of Mañé, IPM youth seminar in topology and daynamics, June 2021. (Virtual)

Geometric control methods in the study of Mañé perturbations of the linearized Poincare maps, Moscow seminar of geometric theory of optimal control, April 2021. (Virtual)

Local normal form on orbits of a convex/non-convex Hamiltonian vector field, seminaire des doctorants d'Analyse d'Orsay, March 2021.

A local normal form on regular orbits of a Hamiltonian vector field and its applications, reunion's day of Analysis team in ENS Paris, September 2020.

HONORS AND AWARDS	2018-2021	Marie Sklodowska-Curie grant of European Union's Horizon research and innovation program.
	2018-2021	Doctoral fellowship, *Foundation Sciences Mathématiques de Paris*.
TEACHING EXPERIENCE	Summer 2024	Coordinator, Linear Algebra I, University of Toronto
	Winter 2024	Adviser, Reading Course: Symbolic Dynamics and its applications, University of Toronto
	Winter 2024	Instructor, Linear Algebra II, University of Toronto
	Fall 2023	Coordinator, Differential Equations, University of Toronto
	Summer 2023	Coordinator, Multivariable Calculus, University of Toronto
	Spring 2023	Instructor, Linear Algebra II, University of Toronto
	Fall 2022	Instructor, Introduction to Mathematical Proof, University of Toronto
	Spring 2022	Teacher Assistant, Analyse 2, PSL University-Dauphine University.
	Spring 2018	Teacher Assistant, Multivariable Calculus, Sharif University of Technology.
	Fall 2018	Teacher Assistant, Calculus 1, Sharif university of technology.
	Spring 2017	Teacher Assistant, Multivariable Calculus, Sharif University of Technology.
VISITS	May 2023	Université de Montréal, Montréal, Canada
	February 2023	University of Manitoba, Winnipeg, Canada
	January 2022	Ruhr University, Bochum, Germany
	October 2020	J.A.Dieudoné laboratory, Nice, France.
	May 2018	École normal supérieure, Paris, France.

LANGUAGES   English: Fluent
French: Professional proficiency
Persian: Native