
EDUCATION	Courant Institute of Mathematical sciences <i>Ph.D. in Pure Mathematics</i> • Advisors: Guido De Philippis & Fang-Hua Lin • Research area: Geometric measure theory & Partial Differential equations	New York, NY 2020 - 2025 (<i>expected</i>)
	Department of Mathematics, Sharif University of Technology <i>B.S. in Applied Mathematics</i> • Advisor: Morteza Fotouhi	Tehran, Iran 2015 - 2019
PUBLICATIONS	<ol style="list-style-type: none">1. Guido De Philippis, Aria Halavati, Alessandro Pigati. Decay of excess for the abelian Higgs model. <i>Preprint</i>, 2024.2. Aria Halavati. Quantitative stability of Yang-Mills-Higgs instantons in two dimensions. <i>Accepted to Archive for rational mechanics and analysis</i>, 2023.3. Aria Halavati. New weighted inequalities on two-manifolds. <i>Preprint</i>, 2023.	
INVITED AND UPCOMING TALKS	University of Toronto student PDE seminar Online	14 Feb 2024
	Courant Geometric analysis seminar New York, NY	6 Sep 2024
	Cornell Analysis seminar Ithaca, NY	9 Sep 2024
	Virtual Analysis and PDE seminar, hosted by UC Irvine Online	3 Oct 2024
	Stanford Geometry seminar Stanford, CA	16 Oct 2024
	UC San Diego Geometry seminar San Diego, CA	31 Oct 2024
WORKSHOPS AND CONFERENCES	Oberwolfach PDE workshop 2330 (invited) Germany	23-29 July 2023
	Joint Mathematics meeting 2024 San Fransisco, CA	3-6 Jan 2024
	SLmath - Recent progress on geometric analysis and Riemannian geometry (funded) Berkeley, CA	21-25 Oct 2024
TEACHING	SLmath, Berkeley. Teaching Assistant for a summer school:	
	<ul style="list-style-type: none">• Titled <i>Special Geometric Structures and Analysis</i> (St. Mary's College) 17-28 July 2024• An introduction to geometric measure theory.	
	Courant Institute of mathematical sciences, NYU. Teaching Assistant:	
	<ul style="list-style-type: none">• Calculus 1• Math for Econ• Grea Ideas in math for non-math majors• Linear Algebra• Probability and Statistics• Analysis	Fall 2019 & Fall 2021 Spring 2020 Spring 2020 Fall 2022 Spring 2022 Fall 2023 & Spring 2024 & Fall 2024
	Young Scholar's club, Tehran, Iran.	
	<ul style="list-style-type: none">• Tutoring Iran's IMO team	2016
	Kerman, Iran.	
	<ul style="list-style-type: none">• Math classes for students in my hometown. (7 national and 1 IMO medal from my class) 2014-2015	

AWARDS
AND
HONORS

- **Peter Lax Fellowship**, Awarded to an outstanding PhD student, Courant Inst. 2022
- **First Prize**, International Mathematical Competition, UCL. 2017
- **Gold Medal**, International Mathematical Olympiad. 2015
- **Gold Medal**, Iran's National Mathematical Olympiad. 2014

ACADEMIC
SERVICES

Reviewer for: *Canadian Journal of mathematics,*
Journal of Functional Analysis.

Co-organized: *Courant's Student/Postdoc seminar,*
Social chapter of Courant student organization,
A social climate survey administered for Courant's students feedback,
A geometric measure theory reading group at Courant.

SKILLS

Languages: Persian, English.

Programming: Python-Tensorflow-Pytorch, C++, MATLAB.

Music: Piano, Setar, Guitar, Oud.