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Aria Halavati

Employment	Università Bocconi Postdoc, funded by ERC Project ANGEVA • Mentor: Antonio De Rosa	Milan, Italy Sep 2025-Aug 2027	
Education	Courant Institute of Mathematical sciences, New York University New York, Ph.D. in Pure Mathematics Sep 2020 - May 2 • Advisors: Guido De Philippis & Fang-Hua Lin • Research area: Geometric measure theory & Partial Differential equations		
	Department of Mathematics, Sharif University of Technology B.S. in Mathematics • Advisor: Morteza Fotouhi	Tehran, Iran 2015 - 2019	
Publications	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>Arch Rational Mech Anal</i> 248-(88), 2024.		
	3. Aria Halavati. New weighted inequalities on two-manifolds. Preprint, 2023.		
h.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	University of Toronto student PDE seminar Online	14 Feb 2024	
Invited and Upcoming	Courant Geometric analysis seminar New York, NY	6 Sep 2024	
Talks	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	
	MIT Analysis seminar Boston, MA	12 Nov 2024	
	Princeton DGGA Seminar Princeton, NJ	26 Feb 2025	
	UT Austin Analysis seminar Austin, TX	12 Mar 2025	
	cSplash, Courant Institute New York, NY	5 Apr 2025	
	UNAM Juriquilla, Queretaro, Mexico	6-8 Aug 2025	
	Scuola Normale Superiore di Pisa Pisa, Italy	5-7 Nov 2025	
	Oberwolfach PDE workshop 2330 (invited) Germany	23-29 July 2023	
Workshops	Joint Mathematics meeting 2024 San Fransisco, CA	3-6 Jan 2024	
and Conferences	SLmath - Recent progress on geometric analysis and Riemannian geometry (funded) Berkeley, CA 21-25 Oct 2024 SLmath - Geometry and analysis of special structures on manifolds (funded) Berkeley, CA 18-22 Nov 2024		

Awards and	 Peter Lax Fellowship, Awarded to an outstanding PhD student, C First Prize, International Mathematical Competition, UCL. 	Courant Inst. 2022 2017		
Honors	• Gold Medal, International Mathematical Olympiad.	2015		
TIONORS	Gold Medal, Iran's National Mathematical Olympiad.	2014		
	Reviewer for: Canadian Journal of mathematics,			
ACADEMIC	Journal of Functional Analysis,			
Services	Ann. Inst. Henri Poincare, Anal. Non Lineaire.			
	Co-organized: Courant's Graduate Student/Postdoc seminar,			
	Social chapter of Courant student organization,			
	A social climate survey administered for Courant's students feedback,			
	A geoemtric measure theory reading group at Couran	et.		
Teaching	SLmath, Berkeley. Teaching Assistant for a summer school:			
	• Titled Special Geometric Structures and Analysis (St. Mary's College) 17-28 July 2024			
	• An introduction to geometric measure theory.			
	Courant Institute of mathematical sciences, NYU. Teaching Assistant:			
	• Calculus 1	Fall 2019 & Fall 2021		
	Math for Econ	Spring 2020		
	Grea Ideas in math for non-math majors	Spring 2020		
		1 2022 & Spring 2025		
	Probability and Statistics	Spring 2022		
	• Analysis Fall 2023 & Spr	fall 2023 & Spring 2024 & Fall 2024		
	Young Scholar's club, Tehran, Iran.			
	Tutoring Iran's IMO team	2016		
	Kerman, Iran.			
	 Math classes for students in my hometown. (7 national and 1 IMO medal from my class) 2014-2015 			
Skills	Languages: Persian, English.			
	Programming: Python-Tensorflow-Pytorch, C++, MATLAB.			

Music: Piano, Setar, Guitar, Oud.