

Anuj Kumar

CONTACT INFORMATION	Indiana University Bloomington Department of Mathematics 831 E 3rd St, Bloomington, IN-47405	(812) 855-0902 kumar22@iu.edu https://akumar2412.github.io/
RESEARCH INTERESTS	Mathematical Fluid Dynamics, Turbulence, Stochastic Partial Differential Equations	
EDUCATION	Indiana University Bloomington , Indiana Ph.D., Mathematics Advisor: Michael S. Jolly Co-advisor: Vincent R. Martinez (Hunter College, CUNY) Indian Statistical Institute , Kolkata, India. Master of Mathematics. Indian Institute of Technology , Delhi, India. Bachelor of Technology, Mechanical Engineering.	2016–2022 (expected) 2016 2013
PUBLISHED OR SUBMITTED WORKS	<ol style="list-style-type: none">1. M.S. Jolly, A. Kumar, and V.R. Martinez, <i>On existence, uniqueness, and smoothing to the generalized SQG equation in critical Sobolev spaces</i>, Communications in Mathematical Physics, DOI 10.1007/s00220-021-04124-9, May 20, 2021.2. M.S. Jolly, A. Kumar, and V.R. Martinez, <i>On local well-posedness of logarithmic inviscid regularizations of generalized SQG equations in borderline Sobolev spaces</i>, Communications on Pure and Applied Analysis, DOI 10.3934/cpaa.2021169, August 29, 2021.	
WORKS IN PREPARATION	<ol style="list-style-type: none">1. A. Kumar and V.R. Martinez, <i>On well-posedness of a mildly dissipative family of active scalar equations in borderline Sobolev spaces</i>.	
SEMINARS AND COLLOQUIA	IU PDE and Applied Math Seminar CUNY GC Harmonic Analysis and PDE Seminar IU PDE and Applied Math Seminar IU PDE Graduate Student Seminar IU Graduate Student Colloquium	November 15, 2021 October 1, 2021 November 2, 2020 February 19, 2020 October 30, 2019
CONFERENCES AND SUMMER SCHOOLS ATTENDED	SIAM Conference on Applications of Dynamical Systems <i>Invited speaker in Mathematics of Fluids: Analysis and Computations</i> Miami University Mathematics Conference on Differential Equations and Dynamical Systems and their Applications MSRI Summer School on Recent topics on Well-posedness and Stability of Incompressible Fluid and related topics AMS Spring Central Sectional Meeting Indiana University, Bloomington Research Internship with Professor Tirthankar Bhattacharyya at the Indian Institute of Sciences, Bangalore, India	May 26, 2021 September 20-21, 2019 July 22-August 2, 2019 April 1-2, 2017 May 21-June 26, 2015
HONORS AND AWARDS	IU- Hazel King Thompson Fellowship Summer support under the NSF grant DMS-1818754 IU- James P Williams Memorial Award	Spring 2017, Summer 2019-2021 2018-2021 2017

TEACHING EXPERIENCE	Instructor of Record	
	J 111: Introduction to College Math I	Fall 2021
	M 106: Mathematics of Decision and Beauty	Spring 2020
	Recitation Instructor	
	M 212: Calculus II	Spring 2021
	M 311: Calculus III	Spring 2018, Fall 2019
	M 211: Calculus I	Fall 2017, Fall 2018
	Grader	
	M 541: PDE II	Fall 2020
	E 449: Advanced Undergraduate Engineering Mathematical Methods	Fall 2020
	M 540: PDE I	Spring 2019
	M 512: Real Variable II	Spring 2019
	M 303: Linear Algebra for Undergraduates	Summer 2017
	Teaching Assistant	
	M 119: Brief Survey of Calculus I	Fall 2016, Fall 2021
	D 116: Introduction to Finite Math I	Fall 2016
	Graduate Mentor for Directed Reading Program	
	Student: Chenyi Bi	Spring 2020
	Project Title: Introduction to Options and the Black-Scholes Equation	
REFERENCES	Michael S. Jolly	
	Indiana University Bloomington E-mail: msjolly@indiana.edu	
	Vincent R. Martinez	
	Hunter College, CUNY E-mail: vrmartinez@hunter.cuny.edu	