LINFENG LI

Department of Mathematics University of California, Los Angeles MS 5352, 520 Portola Plaza Los Angeles, CA 90095

APPOINTMENT

Hedrick Assistant Adjunct Professor University of California, Los Angeles

EDUCATION

Ph.D. in Applied Mathematics
University of Southern California
Advisors: Juhi Jang and Igor Kukavica
M.S. in Mathematical Finance
University of Southern California
B.S. in Mathematical Finance
Jilin University

Sep. 2023 – present Los Angeles, US

Aug. 2017 – May 2023 Los Angeles, US

Aug. 2015 – May 2017 Los Angeles, US Aug. 2011 – June 2015 Changchun, China

RESEARCH INTERESTS

Partial differential equations and fluid dynamics.

AWARDS

Chinese Government Award for Outstanding Self-financed Students Abroad	June 2023
USC Center for Applied Mathematical Science Graduate Student Prize	April 2022
USC Theodore Edward Harris Graduate Research Prize	March 2022

PUBLICATIONS AND PREPRINTS

- 1. Mach limits in analytic spaces (with J. Jang and I. Kukavica), *Journal of Differential Equations*, 299 (2021), pp. 284–332.
- 2. Mach limits in analytic spaces on exterior domains (with J. Jang and I. Kukavica), *Discrete and Continuous Dynamical Systems*, 2022, 42 (8): 3629–3659.
- 3. Mach limits of the isentropic fluids in the analytic spaces (with Y. Tan), Z. Angew. Math. Phys. 74, 164 (2023).
- 4. On the local existence of solutions to the Navier-Stokes-wave system with a free interface (with I. Kukavica and A. Tuffaha), to appear in Journal of Mathematical Fluid Mechanics.
- 5. Maximal regularity for the Neumann-Stokes problem in *H*^{*r*/2,*r*} spaces (with I. Kukavica and A. Tuffaha), C. R. Math. Rep. Acad. Sci. Canada Vol. 45 (3) 2023, pp. 56-63.
- 6. A regularity result for the free boundary compressible Euler equations of a liquid, Nonlinearity, 37 (2024), 035019.

Email: lli265@math.ucla.edu https://www.math.ucla.edu/~lli265 7. On the local existence of solutions to the fluid-structure interaction problem with a free interface (with I. Kukavica and A. Tuffaha), submitted.

CONFERENCE TALKS

AMS Spring Western Sectional Meeting	May 2024
San Francisco State University, San Francisco	
AMS Spring Eastern Sectional Meeting	April 2024
Howard University, Washington DC	_
Analysis and PDE seminar	Oct. 2023
University of California, Los Angeles	
AMS Spring Western Sectional Meeting	May 2023
California State University, Fresno	-
Analysis Seminar	Jan. 2023
University of California, San Diego	
Analysis and PDE Seminar	Dec. 2022
BICMR, Peking University	
Webinar on Analysis and PDE	March 2022
Online	
Shanks workshop on Mathematical Aspects of Fluid Dynamics	Feb. 2022
Vanderbilt University	
AMS special session "nonlinear PDEs and fluid dynamics"	May 2021
Online	-
PROFESSIONAL SERVICES	
Co-organizer of AMS spring western special session	May 2023

California State University, Fresno Reviewer of AMS Mathematical Reviews Dec. 2023 - present

TEACHING AS INSTRUCTOR AT UCLA

Linear Algebra II	Spring 2024
Calculus II	Winter 2024
Real Analysis	Winter 2024
Calculus II	Fall 2023

TEACHING ASSISTANT EXPERIENCE AT USC

Mathematics of Physics and Engineering II	Spring 2023
Linear Algebra and Differential Equations	Spring 2022
Linear Algebra and Differential Equations	Summer 2021
Real Analysis (undergraduate)	Fall 2020
Real Analysis (graduate)	Summer 2020
Calculus III	Spring 2020
Calculus III	Spring 2019
Real Analysis (undergraduate)	Fall 2018
Ordinary Differential Equations	Spring 2018
Calculus I	Fall 2017