

Patrick Flynn

CONTACT INFORMATION	University of California, Los Angeles Math Sciences Building 520 Portola Plaza Box 951555 Los Angeles, CA 90095	+1 (401) 863-2335 pfflynn@math.ucla.edu
RESEARCH INTERESTS	Partial differential equations, kinetic theory, fluid equations	
EMPLOYMENT	University of California, Los Angeles Hedrick Assistant Adjunct Professor (2023-Present)	
EDUCATION	Brown University Ph.D. Candidate, Applied Mathematics (2018-2023) M.S. in Applied Mathematics (2020) Advisor: Benoit Pausader Oregon State University B.S. in Mathematics and Physics (2014-2018) Summa Cum Laude	
PUBLICATIONS AND PREPRINTS	<ol style="list-style-type: none">1. Flynn, Patrick. The massless electron limit for the Vlasov-Poisson-Landau system (with Yan Guo). <i>arXiv preprint arXiv:2301.00919</i> (2023). link2. Scattering map for the Vlasov–Poisson system (with Zhimeng Ouyang, Benoit Pausader, and Klaus Widmayer). <i>Peking Mathematical Journal</i> (2021): 1-28. link3. The vanishing surface tension limit of the Muskat problem (with Huy Q. Nguyen). <i>Communications in Mathematical Physics</i> 382.2 (2021): 1205-1241. link4. Self-organized clusters in diffusive run-and-tumble processes (with Quinton Neville, and Arnd Scheel). <i>Discrete and Continuous Dynamical Systems-Series S</i> 13.4 (2019): 1187-1208. link	
INVITED TALKS	Princeton University Fluids Seminar (February 2023) Boston University Dynamics Seminar (September 2022) Brown University PDE Seminar (September 2022) University of Barcelona, Mathematical Analysis Seminar (June 2022) University of Michigan, Differential Equations Seminar (March 2022) Online North East PDE and Analysis Seminar (February 2021)	
TEACHING EXPERIENCE	Fall 2022	Instructor, Single Variable Calculus, Part II
	Spring 2020	Teaching Assistant, Applied Partial Differential Equations
	Fall 2019	Teaching Assistant, Applied Partial Differential Equations
HONORS AND AWARDS	2020–2023	National Science Foundation Graduate Research Fellowship
	2018–2020	Presidential Fellowship, Brown University

OUTREACH	2020	Mentor for applied math directed reading program on stochastic control
	2019	Led student workshop on the Rayleigh-Taylor instability at applied math graduate student retreat
UNDERGRADUATE RESEARCH EXPERIENCE	2018	Computational Physics Student Summer Workshop Advisors: Juan Saenz, Jesse Canfield Los Alamos National Laboratory
	2017	Complex Systems REU Advisor: Arnd Scheel, Department of Mathematics University of Minnesota, Twin Cities