CV
STAN PALASEK

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Education.

- PhD in Mathematics, UCLA, 2023
  - Thesis: Some quantitative regularity theorems for the Navier-Stokes equations
  - Advisor: Terence Tao
- MA in Mathematics, UCLA, 2019
- AB in Mathematics, Princeton University, 2017
  - Thesis: A paralinearization of the 2d and 3d gravity water wave system in infinite depth

Postdoctoral appointments.

- Institute for Advanced Study, Postdoctoral member, 2023-24 and 2025-26
- Princeton University, Postdoctoral Research Associate, 2024-25

Mathematics publications.

- (with A. Bulut and M. K. Huynh) Non-uniqueness up to the Onsager threshold for the forced SQG equation, arXiv:2310.12947 (submitted)
- (with A. Bulut and M. K. Huynh) Convex integration for the forced Euler equations above the Onsager exponent, arXiv:2301.00804 (submitted)
- (with W. Ożański) Quantitative control of solutions to the axisymmetric Navier-Stokes equations in terms of the weak L^3 norm, arXiv:2210.10030, to appear in *Ann. PDE*
- (with A. Bulut and M. K. Huynh) Epochs of regularity for wild Hölder-continuous solutions of the hypodissipative Navier-Stokes system, arXiv:2201.05600
- A minimum critical blowup rate for the high-dimensional Navier-Stokes equations, 2021, *J. Math. Fluid Mech.* 24(108)
- Improved quantitative regularity for the Navier-Stokes equations in a scale of critical spaces, 2021, *Arch. Rational Mech. Anal.* 242(3) pp. 1479-1531

Talks.

- Fluids: Analysis, Applications, & Beyond, AMS Southeastern Sectional Meeting, Mar 2024
- Brown PDE Seminar, Mar 2024
- IAS Analysis and Mathematical Physics Seminar, Feb 2024
- Rutgers Hyperbolic & Dispersive PDE Seminar, Jan 2024
- Dynamics of fluids, AMS Southern Sectional Meeting, Oct 2023
- IAS new member short talk, Sept 2023
- Princeton Analysis Seminar, Sept 2023
- Princeton Analysis of Fluids and Related Topics seminar, Sept 2023
- Recent Advances in Mathematical Fluid Dynamics, Duke (short talk), May 2023
- Nonlinear PDEs in fluids dynamics, AMS Western Sectional Meeting, May 2023
- USC CAMS Colloquium, Feb 2023
- Georgia Tech PDE seminar, Jan 2023

Date: Updated Jan 2024.

– CIRM Nonlinear PDEs in Fluid Dynamics (short talk), May 2022
– LSU Applied Analysis Seminar, March 2022
– Early Career Math Colloquium, University of Arizona, Feb 2022
– Caltech-UCLA-USC Joint Analysis and PDE Seminar, Feb 2022

Organizational activities.

– Co-organizer, special session on "PDEs in Incompressible Fluid Mechanics" at AMS Spring Southeastern Sectional Meeting, FSU, March 2024
– Co-organizer, Princeton Analysis of Fluids and Related Topics seminar, 2023-

Teaching as instructor (UCLA).

Winter 2022	Math 204	Master's Analysis

Teaching as TA (UCLA).

Calculus for life sciences	MAT 3A	x2
Differential equations for life sciences	MAT 3C	
Differential and integral calculus	MAT 31A	
Integration and infinite series	MAT 31B	
Honors real analysis	MAT 131AH	
Analysis II	MAT 131B	x2
Topics in analysis	MAT 131C	
Complex analysis for applications	MAT 132	x3
Linear and nonlinear systems of differential equations	MAT 134	x5
Ordinary differential equations	MAT 135	x3
Partial differential equations	MAT 136	
Mathematical modeling	MAT 142	
Probability theory II	MAT 170B	
Foundations of actuarial mathematics III	MAT 178C	

Awards.

– Pacific Journal of Mathematics Dissertation Prize, 2023
– Dissertation Year Fellowship, UCLA, 2022-23
– Graduate Dean's Scholar Award, UCLA, 2017-19
– Magna cum laude in Mathematics, Princeton University, 2017

Other publications.

– Epigenetic memory via concordant DNA methylation is inversely correlated to developmental potential of mammalian cells, 2017, PLOS Genetics 13(11): e1007060, joint with Minseung Choi, Diane Genereux, et al.
– Information flow in cellular automata, 2013, Complex Systems 22(2) pp. 193-202.