PML PHYSICAL MATHEMATICS LABORATORY
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University of North Carolina at Chapel Hill
Department of Mathematics
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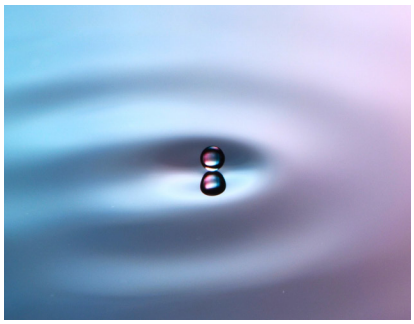
SCAN ME

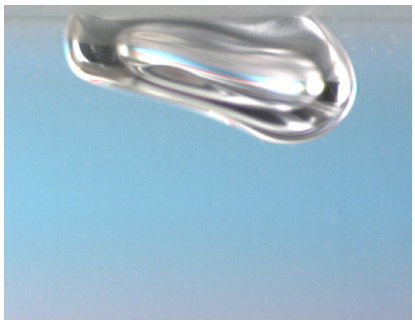
POSTDOCTORAL RESEARCH ASSOCIATE

Department of Mathematics, University of North Carolina at Chapel Hill

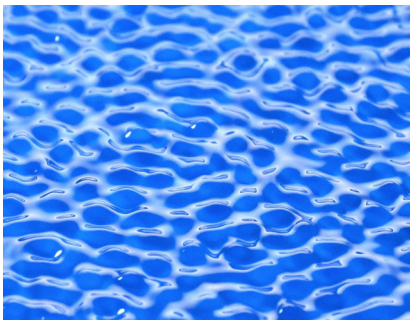
Fluid Mechanics & Soft/Active Matter



walking droplets



galloping bubbles



active waves

Advisor: Prof. Pedro J. Sáenz
Location: University of North Carolina at Chapel Hill
Start Date: Summer 2026

The **Physical Mathematics Laboratory** (https://www.pml.unc.edu) in the Department of Mathematics at the University of North Carolina at Chapel Hill invites applications for a Postdoctoral Research Associate to join our group working at the intersection of fluid mechanics and soft/active matter physics. Current research directions include pilot-wave hydrodynamics, vibrating bubbles, nonlinear waves, and active matter. We particularly welcome candidates with strong theoretical backgrounds, though applications from outstanding experimentalists are also encouraged. Ideal theoretical candidates will have expertise in applied mathematics, including asymptotic analysis, perturbation methods, dynamical systems, and scientific computation.

The successful candidate will be expected to contribute actively to the research program of the group, mentor graduate and undergraduate researchers, and help foster collaborations within and beyond UNC. The position also offers opportunities for professional development, including teaching responsibilities and participation in securing research funding. A Ph.D. in mathematics, physics, engineering, or a related field is required at the time of appointment.

The Physical Mathematics Laboratory integrates mathematical theory and numerical simulations with in-house experiments conducted in a dedicated wet lab. The broader Department of Mathematics at UNC provides a collaborative environment with extensive experimental and computational resources and hosts several research groups in related areas (https://amath.unc.edu). The postdoctoral fellow will also benefit from being based in the Research Triangle, one of the leading research hubs in the United States, home to three Tier-1 research universities and the Research Triangle Park (RTP).

The initial appointment is for one year, with anticipated extensions based on satisfactory performance. Review of applications will begin immediately and will continue until the position is filled.

To apply, please follow instructions on MathJobs:
https://www.mathjobs.org/jobs/list/27813

For further information, please contact

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