

CONNOR W. MAGOON

connorwm@live.unc.edu
<https://cwmagoon.github.io>

EDUCATION

The University of North Carolina at Chapel Hill (UNC)

PhD Applied Mathematics 2023-

BS Physics and Applied Mathematics 2019-2023

HONORS

Gallery of Fluid Motion Award, American Physical Society / Division of Fluid Dynamics 2024

Doctoral Merit Fellowship, UNC 2023-2024

Archibald Henderson Mathematics Medal, UNC 2023

Milton van Dyke Award, American Physical Society / Division of Fluid Dynamics 2022

PUBLICATIONS

The way bubbles gallop (**accepted**)

Jian H. Guan, Saiful. I. Tamim, Connor W. Magoon, Howard A. Stone, and Pedro J. Sáenz
Physical Review Fluids (2025)

Gallopig Bubbles

Jian H. Guan, Saiful. I. Tamim, Connor W. Magoon, Howard A. Stone, and Pedro J. Sáenz
Nature Communications (2025)

Traveling Faraday waves

Jian H. Guan, Connor W. Magoon, Matthew Durey, Roberto Camassa, and Pedro J. Sáenz
Physical Review Fluids (2023)

PREPRINTS

Differentiation Through Black-Box Quadratic Programming Solvers

Connor W. Magoon, Fengyu Yang, Noam Aigerman, Shahar Z. Kovalsky
Submitted. (2025)

TALKS

Collective Dynamics of Galloping Bubbles

Connor W. Magoon, Xinyun Liu, Jian H. Guan, Saiful I. Tamim, and Pedro J. Sáenz
APS Division of Fluid Dynamics Meeting (2024)

Direct Numerical Simulations of Vibrating Bubbles Self-Propelling Along Solid Boundaries

TEACHING

Instructor

First Course in Differential Equations Laboratory (MATH 383L; Fall 2025)

TA

Calculus of Functions of Several Variables (MATH 233; Fall 2024, 2025)

General Physics II: For Students of the Life Sciences (PHYS 115; Summer 2021)

Introductory Calculus-based Electromagnetism and Quanta (PHYS 119; Fall 2020)

Grader

Introduction to Fluid Mechanics (MATH 563; Spring 2025)

Elementary Differential Equations (MATH 524; Spring 2024)