

# FLUID MECHANICS SEMINAR SERIES

ENGR298

Winter 2020-21

Tuesdays at 4:30 PM - Seminars are held via Zoom

**Jan. 12 “Affronting Ocean Models: Submesoscale Interactions between Fronts, Instabilities, and Waves”**

Prof. Baylor Fox-Kemper

*Department of Earth, Environmental, and Planetary Sciences, Brown University*

**Jan. 19 “Machine Learning for Fluid Mechanics”**

Prof. Steven Brunton

*Department of Mechanical Engineering, University of Washington*

**Jan. 26 “A Quest to Observe the Turbulent Cascade in Real Time”**

Prof. Michael Brenner

*School of Engineering and Applied Sciences & Department of Physics, Harvard University*

**Feb. 2 “Fluid Mechanic Instability and its Impact on Gas Turbine Combustor Operability”**

Prof. Jacqueline O’Connor

*Department of Mechanical Engineering & Director of the Penn State Center for Gas Turbine Research, Education, and Outreach, Penn State University*

**Feb. 9 “A Molecular-Level Understanding of Hypersonic Flows”**

Prof. Thomas E. Schwartzentruber

*Department of Aerospace Engineering and Mechanics, University of Minnesota*

**Feb. 16 “On the Reynolds Number Dependence of Turbulent Flames: The Cascade through the Lens of Power Laws, Surface Density Function, and Fractal Analysis”**

Prof. Fabrizio Bisetti

*Department of Aerospace Engineering and Engineering Mechanics, University of Texas at Austin*

**Feb. 23 “Revealing Hidden Dimensions in Soft Materials (or How to Play a Chord on a Rheometer)”**

Prof. James Swan

*Department of Chemical Engineering, Massachusetts Institute of Technology*

**Mar. 2 “Driving Physics of Inverted Flag Flapping”**

Prof. Andres J. Goza

*Department of Aerospace Engineering, University of Illinois at Urbana-Champaign*

**Mar. 9 “Reactive Transport in Porous Media: Bridging Scales, Data and Physics”**

Prof. Ilenia Battiato

*Department of Energy Resources, Stanford University*

**Mar. 16 “Ignition by Pressure Pulses”**

Prof. Joseph E. Shepherd

*Aeronautics and Mechanical Engineering, California Institute of Technology*

*For seminar information, please contact Prof. Matthias Ihme at [mihme@stanford.edu](mailto:mihme@stanford.edu)*