

Rotating Turbulence: Interplay and Separability of Bulk and Boundary Dynamics

January 27 - 31, 2025

Scientific Overview

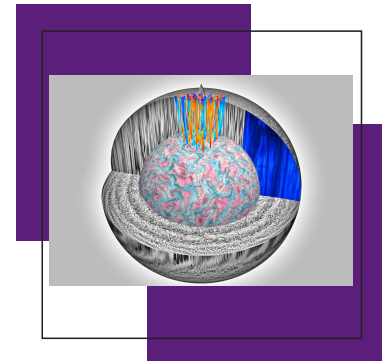
This IPAM workshop will bring together the rotating turbulence community to address the complex interplay between boundary and bulk dynamics in rotating convection systems. A successful meeting will yield new theoretical, numerical and laboratory approaches for both deconvolving boundary from bulk processes and for better modeling how the boundary and bulk flows interact and alter each other. Such knowledge is necessary for building the next generation of geophysical and astrophysical fluid dynamical turbulent transport schemes and for elucidating when boundary phenomena will dominate over bulk processes in natural systems.

This workshop will include a poster session; a request for posters will be sent to registered participants in advance of the workshop.

This workshop will also honor the work and contributions to the field by the late Keith Julien.

Participation

Additional information about this workshop including links to register and to apply for funding, can be found on the webpage listed below. Encouraging the careers of women and minority mathematicians and scientists is an important component of IPAM's mission, and we welcome their applications.



Organizers

Jonathan Aurnou (University of California, Los Angeles (UCLA))
Susanne Horn (Coventry University)
(Keith Julien) (University of Colorado Boulder)
Rudie Kunnen (Technische Universiteit Eindhoven)

Speakers

Keaton Burns (Massachusetts Institute of Technology)
Simon Cabanes (Institut de physique du globe de Paris)
Tao Cai (Macau University of Science and Technology)
Michael Calkins (University of Colorado Boulder)
Hao Cao (University of California, Los Angeles (UCLA))
Robert Ecke (Los Alamos National Laboratory)
Nick Featherstone (University of Colorado Boulder)
Rafa Fuentes (University of Colorado Boulder)
Basile Gallet (Commissariat à l'Énergie Atomique (CEA))
Pascale Garaud (University of California, Santa Cruz)
Wanying Kang (Massachusetts Institute of Technology)
Edgar Knobloch (University of California, Berkeley (UC Berkeley))
Michael Le Bars (Institut de Recherche sur les Phénomènes Hors Equilibre)
Daniel Lecoanet (Northwestern University)
Daphne Lemasquerier (University of St. Andrews)
Alban Pothérat (Coventry University)
Seth Putterman (University of California, Los Angeles (UCLA))
Olga Shishkina (Max Planck Institute for Dynamics and Self-Organization)
Krista Soderlund (University of Texas at Austin)
Frank Stefani (Center for Advanced Systems Understanding, Helmholtz-Zentrum Dresden-Rossendorf)
Steve Tobias (University of Leeds)
Adrian Van Kan (University of California, Berkeley (UC Berkeley))
Geoff Vasil (University of Edinburgh)
Paula Wulff (Max Planck Institute for Solar System Research)



For more information, visit the program webpage:
www.ipam.ucla.edu/RTI2025