

# MADRAS 2025

## Mixing And Dispersion in Rotating And Stratified flows

The Earth's climate is influenced by a complex system of processes occurring at different spatial and temporal scales. Mixing and dispersion within rotating and stratified flows are essential components that affect energy transfer, turbulence, and our understanding of the climate system. The five-day workshop brings together experts and early career researchers from various disciplines to discuss recent advances in the theory, modeling, and observation of mixing and dispersion in geophysical fluid dynamics.

### Workshop details:

12<sup>th</sup> - 16<sup>th</sup> February, 2025

TT Jagannathan Hall (IC & SR Building)  
IIT Madras, India

### Organizers

Anubhab Roy  
Kannabiran Seshasayanan  
Manikandan Mathur

Geophysical Flows Lab,  
IIT Madras



### Key themes

- Particle dispersion in turbulent flows
- Impact of Gravity waves in mixing
- Lagrangian measurements in oceans
- Experiments in Rotating and Stratified flows

### Pedagogical lectures by

**Alain Pumir**

CNRS and École Normale Supérieure de Lyon, France

**Arjun Jagannathan**

IIT Madras, India

**Eric D'Asaro**

University of Washington, USA

**Kannabiran Seshasayanan**

IIT Madras, India

**Mohamed Housseem Kasbaoui**

Arizona State University, USA

**Philippe Odier**

École Normale Supérieure de Lyon, France



**For more information, contact:**

Kannabiran S.  
[cfmadrass2025@gmail.com](mailto:cfmadrass2025@gmail.com)