

Lecture Announcement (Vorlesungsankündigung)

Special Topics in Oceanography – Marine Turbulence

(Spezielle Themen der Ozeanographie - Marine Turbulenz)

Time: Monday from 16:00 to 18:00

Scope: Physics MSc (2 SWS + 0.5 SWS exercise sessions)

Start: 20 April 2020

Location: Stud.IP Video Lecture

Lecturer: Priv. Doz. Dr. habil. Lars Umlauf (lars.umlauf@io-warnemuende.de)

Exercises: Monday from 15:00 to 16:00 (every second week)

Prerequisites: This class is great for everyone interested in a brief introduction into the fascinating field of fluid turbulence. Basic knowledge in fluid mechanics (Navier-Stokes Equations) is advantageous.

Material covered:

1. Phenomenology and observation of turbulence in the ocean
2. Deterministic description of turbulent flows
3. Statistical description of turbulent flows
4. Spectral theory
5. Statistical turbulence models

