



31 OCTOBER, 2025

TRAINING

Barcelona Supercomputing
Center. Plaça d'Eusebi Güell, 1-3,
08034 Barcelona, Spain

CHEESE TRAINING:

Computational Methods in Geophysics

31 OCTOBER, 2025

SESSION 1		
09:00-09:10	Welcome	
09:10-09:30	Why numerical methods?	Lecture
09:30-11:00	Fundamentals of wave propagation - analytical solutions - discrete models - parallel computations - finite difference method	Lecture and practicals
11:00-11:30	Coffee break	
11:30-12:30	Pseudospectral method Linear Finite-element methods	Lecture and practicals
13:00-14:00	Lunch break	
SESSION 2		
14:00-15:30	The spectral element method	Lecture and Practicals
15:30-16:00	Coffee break	
16:00-17:30	Applications in Geophysics and/or (Finite-Volume Method and Discontinuous Galerkin Method)	Lecture and Practicals
18:00	Social Gathering	

Academic Staff:

Prof Heiner Igel (Ludwig Maximilian University of Munich)