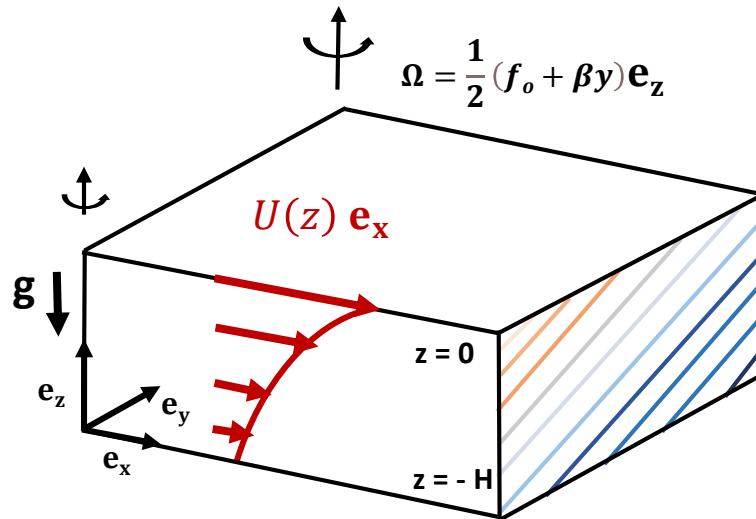


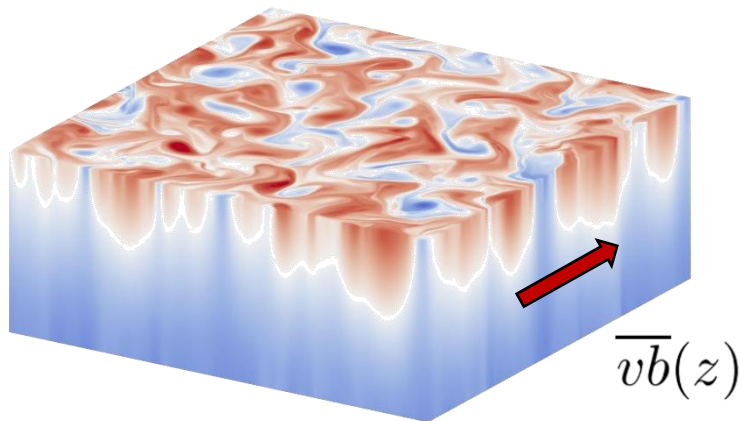
# Vertical structure of transport by ocean mesoscale turbulence

Julie Meunier, Basile Gallet, Benjamin Miquel  
 Service de Physique de l'Etat Condensé, CEA Saclay

## Quasi-2D dynamics of stratified rotating flow on $\beta$ -plane



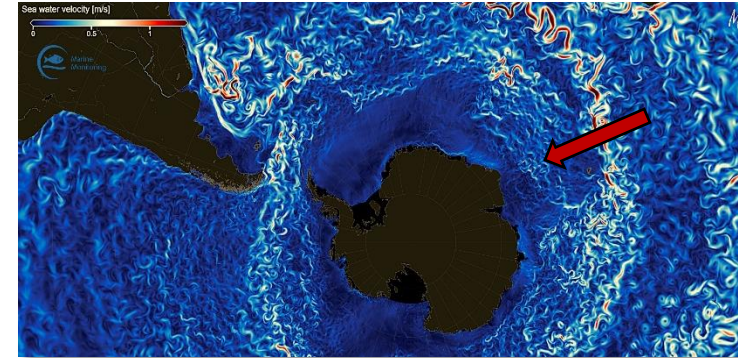
Large scale shear and stratification



Turbulent fluxes of tracers and large scale gradients related by **diffusion tensor**

Snapshot of departure buoyancy field (Meunier, Miquel, Gallet, JFM 2023)

## Parametrizing ocean mesoscale turbulence



Credit: European Union, Copernicus Marine Environment Monitoring Service. Sea water surface velocity (m/s)

