

# 4th COMMODORE Workshop on Advancing Ocean Modeling: Bridging Theory, Computation, Scales, and Applications | (smr 4237)

Contribution ID : 15

Type : **not specified**

## Poster session

*Monday, 21 September 2026 18:30 (1:00)*

### Content

Clément Billy — Sea-ice embedment in NEMO using Brinkman Volume Penalisation  
Diego Bruciaferri (o/b/o C. Guivarc'h) — Improved Antarctic Shelf Water Mass Representation in a Global Ocean-Sea Ice Model  
Peter Busumraph — Enhancing the African Ocean Biodiversity Atlas through Advanced Ocean Modeling: Bridging Theory, Computation, and Ecosystem Applications  
Gabrielle Ching-Johnson — Coupling a Nested NEMO Ocean to the UK Atmosphere: Development and Atmospheric Impacts  
Patrick de Bruijn — Coastal-trapped waves along the western European shelf  
Rut Lamma — Strengthening BMKG Capacity in Ocean-Atmosphere Interaction for Drought and Rainfall Forecasting in Eastern Indonesia  
Kai Logemann — Global biogeochemical modelling with ICON-O/FABM/Ecosmo E2E using locally refined computational meshes  
Martin Losch — Parameterising eddy-driven transport of Circumpolar Deep Water across Antarctic continental slopes  
Muhammad Mubashar Shahzad — Approximate Solutions of Time-Fractional Swift Hohenberg Equation Using Quintic Hyperbolic B-Spline Functions  
Kacper Nowak — GPU Implementation of Implicit Filter for Ocean Spectra  
Patrick Scholz — Diagnosing Numerical Mixing in the Global Finite-volume Sea-Ice Ocean Model (FESOM2) Using Discrete Variance Decay  
Simone Silvestri — A low-storage Runge-Kutta framework for nonlinear free-surface ocean models  
Junchuan Sun — Downscaled climate projections for the Arabian Sea

### Summary

**Session Classification :** not yet classified