



# natESM Focus Workshop 2025

24.9.2025 • Room #034 • DKRZ • Bundesstr. 45a • 20146 Hamburg

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09:30 Arrival and Registration

## Introduction

10:00 Welcome and Introduction: Welcome and short input on natESM and purpose of the workshop  
Jochem Marotzke (MPI-M and natESM Co-Chair)

## Community presentations – Ocean Biogeochemistry Modeling

10:15 Regulated Ecosystem Model (REcoM): Recent advances and plans ahead  
Judith Hauck and Chris Danek (AWI)

10:35 Ocean Biogeochemistry in the ICON Framework: Challenges and Opportunities  
Tatiana Ilyina (UHH | MPI-M)

10:55 ECOSMO and ECOSMO\_E2E: Perspectives and integration challenges  
Kai Logemann (Hereon)

11:15 S h o r t C o f f e e b r e a k

11:30 OPEM: Optimality-based non-Redfield Plankton-Ecosystem Model, overview and recent developments  
Andreas Oschlies (GEOMAR)

11:50 Why we need more "bio" in high-resolution biogeochemistry modeling  
Nicolas Gruber (ETH Zürich)

12:10 L u n c h b r e a k

## Open discussion: Key Integration Challenges

13:10 Input presentation: Overview of technical integration pathways and interface requirements in natESM  
natESM - RSE Wilton Jaciel Loch (DKRZ)

### Moderated Discussion

- 13:25
- Agreeing on strategies for integration (e.g., potential for consensus on ocean/biogeochemical requirements and approaches)
  - Ensuring compatibility and synergies with other natESM components
  - Strategies for a coherent modeling approach across the community

Moderated by Jochem Marotzke

### Next steps and action items

- 15:30
- Summary of key points
  - Identification of working groups and follow-up actions

15:50 Closing remarks and wrap-up