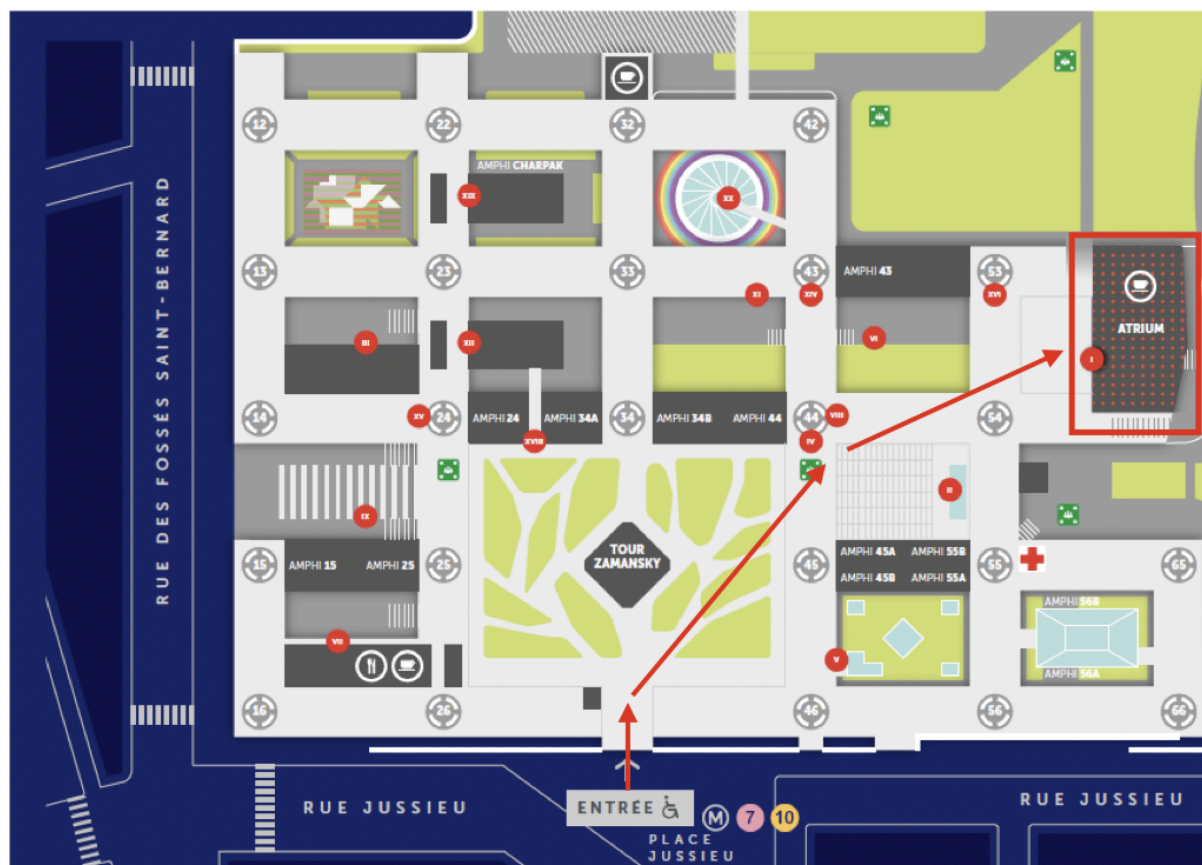


PISCO Meeting 2025

Please find below the program of our annual meeting to be held at Université Pierre et Marie Curie (Paris, Jussieu) on September 25th and 26th.

Meeting place : **Room RC27** (ground floor) of the **Atrium**, Université Pierre et Marie Curie ([4 Place Jussieu, 75005 Paris](#), Jussieu Subway station, line 7).



Please, bring your own cup for water, coffee, tea!

Zoom link

<https://zoom.us/j/99895506320?pwd=JAIAjRgThZINy9H62QReNxDpX8qGD8.1>

Meeting ID: 998 9550 6320

Secret code: 654321

Thursday 25 September

09:30 Welcome Coffee

- 10:00 Meeting introduction (O. Aumont)

Session 1 : Ecosystem dynamics and diversity

- 10:10 J. Rogerson "Complexity in Biogeochemical Models: Consequences for the Biological Carbon Pump."
- 10:35 L. Di Matteo "Including different mesozooplankton feeding strategies in a biogeochemical ocean model impacts global ocean biomass and carbon cycle."
- 10:50 C. Clerc "Evaluating zooplankton in models of increasing complexity."
 - 11:05 Coffee break
- 11:20 F. Barge "Implicit modelisation of mesozooplankton diel vertical migration in PISCES."
- 11:40 L. Dalaut "The impact of nitrate configuration on the trophic chain in a changing climate."
- 11:55 General discussions

Session 2 : Biogeochemical cycles

- 12:10 J. Orr "On shortcuts in gas exchange in ESMs with PISCES and other such models."
- 12:30 O. Karakus "Sea ice and phytoplankton dynamics in the Southern Ocean. Outline the general idea and plan of the project."
- 12:45 A. Planchat "Developing a coral reef module: emphasis on habitat prediction."

*13:00 Buffet lunch
(tower 45, 4th Floor, LOCEAN)*

- 14:00 A. Arens "Describing the phytoplankton seasonal cycle in the Mozambique Channel through phenoregions."
- 14:20 L. Kwiatkowski "Simulating the coral reef carbon cycle feedback in PISCES."
- 14:45 E. Brunet "Mercury tracer implementation in the NEMO-PISCES model."
- 15:05 General discussions

Session 3 : Prospective applications

- 15:25 M. Berger "Natural macroalgae in PISCES."
- 15:45 M. G. Escobar Franco "Topographic and tidal impacts on the dispersal of a deep-ocean tracer."
 - 16:05 Coffee break

- 16:25 M.Bezaud “Global NEMO with doubly nested AGRIF over the Nordic Seas coupled to PISCES.”
- 16:45 Q. Hyvernat “Optimizing PISCES Parameters for North Atlantic Seasonal pCO₂ Predictions: An Ensemble-Based Approach Using BGC-Argo Data.”
- 17:05 S. Ciavatta “Sensitivity analysis of PISCES and other biogeochemical models with respect to the constraints of initial conditions in an operational oceanography system.”
- 17:05 M. Belharet “Vertical migration of zooplankton, simulated using the NERSC DVM model coupled with NEMO-PISCES.”
- 17:25 A. Gaymard “Microplastic in the ocean.”
- 17:45 A. Tagliabue “Update from Liverpool PISCES users.”

18:30 **End of first day's meeting**

Friday 26 September

09:00 **Welcome coffee**

- 09:30 General discussions on Session 3
- 09:50 O. Aumont “State of the PISCES code”
- 10:10 PISCO : News, perspectives
- 10:30 Ongoing and future projects
 - 10:50 *Coffee break*
- 11:10 How should PISCES evolve? (missing components, functionalities...)
 - Benthic module
 - Regional configuration : sharing experiences, boundary conditions,...
 - Parameterisation : CaCO₃, Zooplankton, Mesopelagic domain, River fluxes, trace metals, trait based approaches, anoxic zones (OMZ, denitrification...)...
 - Numerical issues : ORCA1, spinup, complexity, CROCO vs. NEMO (updates, Light-attenuation feedback from Chlorophyll), multi model-ensembles,
 - Coupling between modelling approaches : niche-model, lagrangian, AI,...

13:00 **Buffet lunch**
(tower 45, 4th Floor, LOCEAN)

- 14:00 Informal discussions if needed/identified

16:00 **End of the meeting**