

FRENCH-BRAZILIAN FALL SCHOOL ON SOUTH ATLANTIC PALEOCEANOGRAPHY AND PALEOCLIMATOLOGY

In this intensive advanced course, French and Brazilian lecturers will cover cuttingedge aspects of South Atlantic Paleoceanography and Paleoclimatology in lectures and hands-on activities.

Topics

→ Stable isotopes and trace elements in carbonates

- → Organic geochemistry
- → Terrigenous siliciclastic signals
- → Micropaleontological approaches
- → Age and paleoclimate modelling

March 31 - April 5 e.g., from 09:00 - 12:00h to 14:00 - 17:00h

Maison du CNRS University of São Paulo

Audience

MSc and PhD students Early career post-docs will also be considered

Registration

Jan 6 – Jan 19 for USP graduate students (via Janus) Jan 20 – Jan 24 for other participants (download this <u>form</u> and send it filled to **pgigc@usp.br**)

> In both cases, register in the graduate course "GSA5987-1-1 Paleoceanografia e Paleoclimatologia do Atlântico Sul"





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French-Brazilian Fall School on South Atlantic Paleoceanography and Paleoclimatology

As the only ocean basin in the southern hemisphere to transport energy to the northern hemisphere, the South Atlantic plays a central role in climate. This role is played by the Atlantic meridional circulation, which transports warm, salty surface waters northwards and dense, deep waters southwards. Global warming could lead to a marked weakening of this circulation, with as yet unknown consequences for the climate. Turning to geological archives, such as the marine sediments of the South Atlantic, provides access to such oscillations in the Atlantic meridional circulation, in order to understand their causes and consequences.

The Fall school will bring together the most renowned French and Brazilian experts in the field of South Atlantic paleoceanography and paleoclimatology to tackle this issue of great social importance. This is an intensive six-day course aimed at around 30 master and PhD students, as well as early-career post-docs. The event will take place at the Maison du CNRS at the University of São Paulo (Brazil) between Monday 31 March and Saturday 5 April 2025.

The Fall School relies on three ongoing French-Brazilian scientific initiatives: the <u>AMARYLLIS-AMAGAS II</u> <u>oceanographic cruise</u> (that took place in 2023 along the north-eastern Brazilian margin on board the R/V *Marion Dufresne*) and two ongoing scientific mobility projects between France and Brazil (the IRP-INSU Saravá and CAPES-COFECUB projects). Courses will be given by **seven scientists from France** (e.g. LSCE, GEOPS, LOCEAN, METIS) and **ten lecturers from Brazil** (e.g. University of São Paulo, Federal University of São Paulo, State University of Campinas, Federal University of Fluminense, Federal University of Paraná).

On Wednesday 2 April 2025), the Fall School will merge with the **French-Brazilian official workshop on South Atlantic paleoceanography and paleoclimatology**, which aims to draw up a French-Brazilian program for future research on this theme. Representatives from the São Paulo State Research Funding Agency (FAPESP), the Brazilian scientific program PROASA on the South Atlantic, the CNRS-USP International Research Centre (IRC) (including its 'Ocean Pillar') and the French General Consulate in São Paulo are also invited to take part in this official workshop.

This intensive advanced course (6 hours per day) will cover cutting-edge aspects of South Atlantic paleoceanography and paleoclimatology in lectures and hands-on activities. The following methods and their applications to the South Atlantic will be covered:

- Stable isotopes and trace elements in marine carbonates
- Organic geochemistry applied to marine sediments
- Terrigenous siliciclastic signals in marine sediments
- Micropaleontological approaches in marine sediments
- Age and paleoclimate modelling

Each participant of the Fall School will bring a poster presenting his/her own research activities on the theme. A poster session will take place and posters will remain on display throughout the Fall School, stimulating discussions and informal interactions between participants as well as with lecturers.

It should be noted that the Fall School will be a regular graduate course from the University of São Paulo. Participants have to register directly online via the University of São Paulo portal. At the end of the school, all participants will receive a formal certificate from the University of São Paulo, describing the number of credits that can be used in the student's respective graduate program or simply added to their CV.

The Fall School organizing committee: **Prof. Dr. Cristiano M. Chiessi** (University of São Paulo, Brazil), **Dr. Aline Govin** (LSCE, Gif sur Yvette, France), **Dr. Ioanna Bouloubassi** (LOCEAN, Paris, France), MSc. Luiza S. Amancio (University of São Paulo, Brazil), **Dr. Natalia Vazquez Riveiros** (Geo-Ocean, Brest, France), **Prof. Dr. Thiago dos Santos** (University of São Paulo, Brazil).