



UNIVERSITÀ
DEGLI STUDI
FIRENZE

DST

DIPARTIMENTO DI
SCIENZE DELLA TERRA

ECCELLENZA 2023-2027

Da un secolo, oltre.

Seminar
Prof. Fabienne Marret *University of Liverpool*
and
Prof. Adele Bertini *University of Florence*

Dinocysts and Paleoceanographical Reconstructions in the Quaternary: Methods and Applications

*Valid for 6 CFU in the Phd
course "Earth and Planetary
Sciences".*

November 2025

Dipartimento di Scienze della Terra Via La
Pira 4, 50121, Firenze (FI)

For information and registration:

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Course Description: The course introduces the use of dinocysts in paleoceanographical and paleoclimatic studies, focusing on the Quaternary, through lectures, a workshop on quantitative reconstructions, and practical lab activity.

Course Structure: The course includes four frontal lessons (10 hours) focusing on the role of dinocysts and other palynomorphs in oceanographic and paleoclimatic studies, with particular emphasis on the Quaternary. The methodology for organic-walled dinocyst analysis will be introduced, including an overview of sample preparation, taxonomy, biogeography, ecology and data handling. The workshop (5 hours) will focus on quantitative reconstructions of sea-surface parameters (e.g., temperature, salinity, sea-ice cover) using dinoflagellate cyst assemblages and introducing statistical approaches (PAST, MAT using the R platform).

The course includes a lab session at the Palynology Laboratory of the Department of Earth Sciences (DST), involving sample preparation and microscopic observation (3 hours). The course will be delivered in person, with classroom lectures (10 hours) also available online, and in-person workshop and laboratory activities (with limited attendance).

Date & Schedule:

12 Nov 2025: 16:00 – 18:00 (in person & online)

13 Nov 2025: 08:00 – 11:00 (in person & online)

19 Nov 2025: 16:00 – 18:00 (in person & online)

20 Nov 2025: 08:00 – 11:00 (in person & online) | 17:00 – 19:00 (in person only)

21 Nov 2025: 16:00 – 19:00 (in person only)