

PhD course in Physics, Astrophysics, and Applied Physics - Università degli Studi di Milano
PhD cycle 40 (2024-2025)

All lectures will be given in English.

Course title	4D and 3D theories with four supercharges: Field theory, D-branes, holography and localisation
Teacher in charge of the course	Silke Klemm
List of the teachers of the course <i>[surname/name; affiliation; e-mail]</i>	Antonio Amariti, INFN, Antonio.amariti@mi.infn.it
Training objectives	Knowledge and managing of modern methods in string theory with a specific interest in D-branes, their role in the holographic correspondence and the most recent applications to localization.
Prerequisites <i>[please insert details and also state whether the course has advanced contents suitable for students with prior knowledge of the topics or is also suitable for students without prior knowledge]</i>	Supersymmetry and introduction to string theory.
Detailed course program	D-branes and supersymmetric quantum field theories on D-branes, holography and supersymmetric localization techniques.
Examination modalities	Oral examination
Preliminary schedule <i>[please indicate the weeks when the lectures will be given]</i>	Starting in february 2025.