

INTERNSHIP PROPOSAL

(One page maximum)

Laboratory name: IPhT, CEA, U. Paris-Saclay

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Internship location: IPhT

Thesis possibility after internship: YES (preferably beginning in 2027)

Internship funding: NO

Holographic Conformal Defects and Boundaries

The holographic AdS-CFT correspondence relates certain strongly-interacting conformal field theories to supergravity in AdS. Furthermore, conformal defects, interfaces and boundaries are dual to certain more complicated supergravity solutions of the type $\text{AdS} \times S \times S$ warped over a Riemann surface. We have recently understood the branes whose backreaction gives rise to such solutions, and the purpose of this stage is to use these branes to construct new solutions holographically dual to conformal defects and boundaries.

Please, indicate which speciality(ies) seem(s) to be more adapted to the subject:

Condensed Matter Physics: NO Soft Matter and Biological Physics: NO
Quantum Physics: NO

Theoretical Physics: YES