

## Many-body simulations of noisy quantum devices

This (master-level) internship project concerns the simulations of quantum devices, such as analog quantum simulators or noisy gate-based quantum processors. This includes in particular the use of many-body state compression with tensor networks and the numerical simulations of interacting qubits subject to decoherence (Lindblad equation). This work will be carried out in collaboration with the quantum information theory group at the Institut de Physique Théorique ([quantum.paris](http://quantum.paris)).

This projet may be continued as a PhD thesis.

Contact: G. Misguich

[www.ipht.fr/Pisp/gregoire.misguich/](http://www.ipht.fr/Pisp/gregoire.misguich/)