One ring to rule them all

Beyond the era of the Large Hadron Collider (LHC), future machines are now envisaged for the next decades, and the physics cases motivating their construction are intensively discussed. Among the proposals, a huge 100 TeV proton-proton collider, several times larger than the LHC, is being considered. This proposal is dubbed as FCC-hh [info] and studies of its potential are under way [more info]. The objective of this Master Thesis is to perform a simulation of some new physics process at this collider, to be determined in due time, in order to explore its physics potential.

The student carrying out this Master Thesis will learn phenomenology of physics beyond the Standard Model and to perform detailed Monte Carlo simulations. The work will likely be published in a refereed journal.