

Post-doc (2-years) : CMS(70%) - FCC(30%)

« Fellowships des 2 infinis ».

FCC

Two ways in parallel

- * Mise en place d'un outils générique de l'estimation du flux de donnée (→ puissance consommée)
À partir des simulation existantes (<https://github.com/iLCSoft/lcgeo>)
Optimisation des paramètres résolution / puissance
- * Mise en place d'une simulation IAr
Réutiliser la géométrie existante dans le software FCC

Discussion of a possible “metric” to compare the result

- * séparation π^0/γ utile pour la physique du tau
- * benchmark de Higgs, probablement en lien avec la jet energy resolution

CMS

Double Higgs boson production

The candidate will focus on the $b\bar{b}\tau\tau$ decay channel that is experimentally favourable thanks to its sizeable branching fraction of 7.3% and it has the moderate background contamination. To accomplish the research goal, the candidate will use the Run 3 LHC proton-proton collision dataset

LLR news

New M2 student (Ecole-ETH master program) : 1st March > 31st July

Started fruitful collaboration with Liverpool group (R. Lemmon) on H self-coupling

Based on last year analysis re-restart it using central produced samples and analysis software

Year goal : OR “contribute to the Higgs white paper” OR “write a short white paper”