

The Forward Physics Facility at the HL-LHC.

Tuesday, 13 Sept., 2022

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High Energy collisions at the High-Luminosity Large Hadron Collider (LHC) produce a large number of particles along the beam collision axis, outside of the acceptance of existing LHC experiments. The proposed Forward Physics Facility (FPF), to be located several hundred meters from the ATLAS interaction point and shielded by concrete and rock, will host a suite of experiments to probe Standard Model (SM) processes and search for physics beyond the Standard Model (BSM). FPF experiments will be sensitive to a broad range of BSM physics through searches for new particle scattering or decay signatures and deviations from SM expectations in high statistics analyses with TeV neutrinos in this low-background environment. High statistics neutrino detection will also provide valuable data for fundamental topics in perturbative and nonperturbative QCD and in weak interactions. Experiments at the FPF will enable synergies between forward particle production at the LHC and astroparticle physics to be exploited. The colloquium will outline the FPF physics motivations, and the status of ongoing studies on the facility design and proposed experiments.

Auditorium & Webcast: 4 PM





Please note:

This is a HYBRID colloquium!

Meeting ID: 996 1652 8733 Meeting Password: 733220





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