## Detector challenges at future higgs factories

Wednesday 27 August 2025 14:00 (20 minutes)

The LHC and the HL-LHC demand detectors that can withstand the hostile radiation and high occupancy environment of hadron colliders. On the surface, Higgs factory detectors are without challenges, but they merely are without these specific challenges –that does not make them easy to build. From the complex machine-detector interface to the varied role of muon systems, detectors at Higgs factories challenge our perception of what general purpose collider detectors need. Higgs factories are precision machines and open a realm of precision instrumentation at energy frontier colliders. This talk will cover the unique capabilities and general challenges of detectors at Higgs factories, and will offer a few forward-looking technologies preparing for this era.

Author: CUMMINGS, Grace (Fermi National Accelerator Lab. (US)) Presenter: CUMMINGS, Grace (Fermi National Accelerator Lab. (US)) Session Classification: Parallel