At least three PhD fellowships positions on CMS are available at DESY through the Helmholtz Association (in the context of the Distinguished Professorship of F. Blekman).

Candidates with interest to work on the following topics are invited to apply:

- searches for new physics in high multiplicity final states with top quarks (both resolved and boosted topologies, including displaced signatures)

- object reconstruction and calibration at large jet multiplicities

- studies of detector performance vs physics goals (and algorithmic development) for future colliders, specifically e+e- colliders

All successful candidates will be expected to include a science communication component. Affinity with Machine Learning is a plus. PhD candidates will be enrolled at the University of Hamburg. PhD students are expected to be based at DESY in Hamburg.

PhD candidates are expected to hold (or soon to be awarded) a MSc diploma in physics.