DESY

Particle and Astroparticle Physics Colloquium

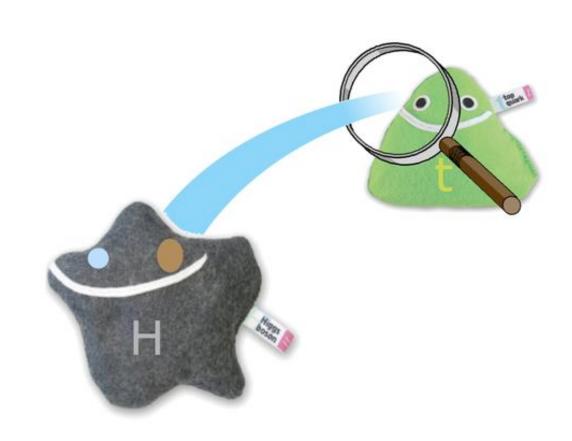


Odd Higgs, Even Higgs: A View from the Top.

Yvonne Peters (University of Manchester)

Despite the success of the standard model of particle physics, several open questions remain. For example, the standard model cannot tell us why there is more matter than antimatter in today's universe. Searches for potential CP-violating effects are therefore one of the main goals of experimental particle physics.

With the discovery of the Higgs boson in 2012 by ATLAS and CMS, a new field of looking for CP violations in Higgs couplings opened up. With the top quark being the heaviest elementary particle known today, and its large



coupling to the Higgs boson, the interconnection of top quarks and Higgs bosons plays an important role in many models beyond the standard model. In this talk, I will give an overview of the status of probing the top-Higgs connection for CP-odd effects.

Tuesday, 17 June, 2025 Auditorium & Webcast 16:00 h





