Prof. Dr. Tobias Hurth Institut für Physik, THEP hurth@uni-mainz.de



PRISMA+ Colloquium

July 10, 2019 at 1 p.m. Lorentz-Raum 05-127, Staudingerweg 7

Michael Spannowsky Institute for Particle Physics, DURHAM

New Opportunities in High-Energy Physics after the Higgs boson discovery

The discovery of the Higgs boson has for the first time established an arguably elementary scalar sector at the electroweak scale. With a newly discovered and yet unexplored scalar sector novel opportunities arise to address fundamental questions in nature. To maximise our understanding of this sector a concerted effort between collider and non-collider experiments, as well as perturbative and non-perturbative methods is required. I will outline peculiarities of the Higgs sector and point towards possible future research directions to explore the electroweak symmetry breaking potential.

