



universität**bonn**



Bethe Center for
Theoretical Physics

Bethe Forum

Lecture Series on “Higgs physics”

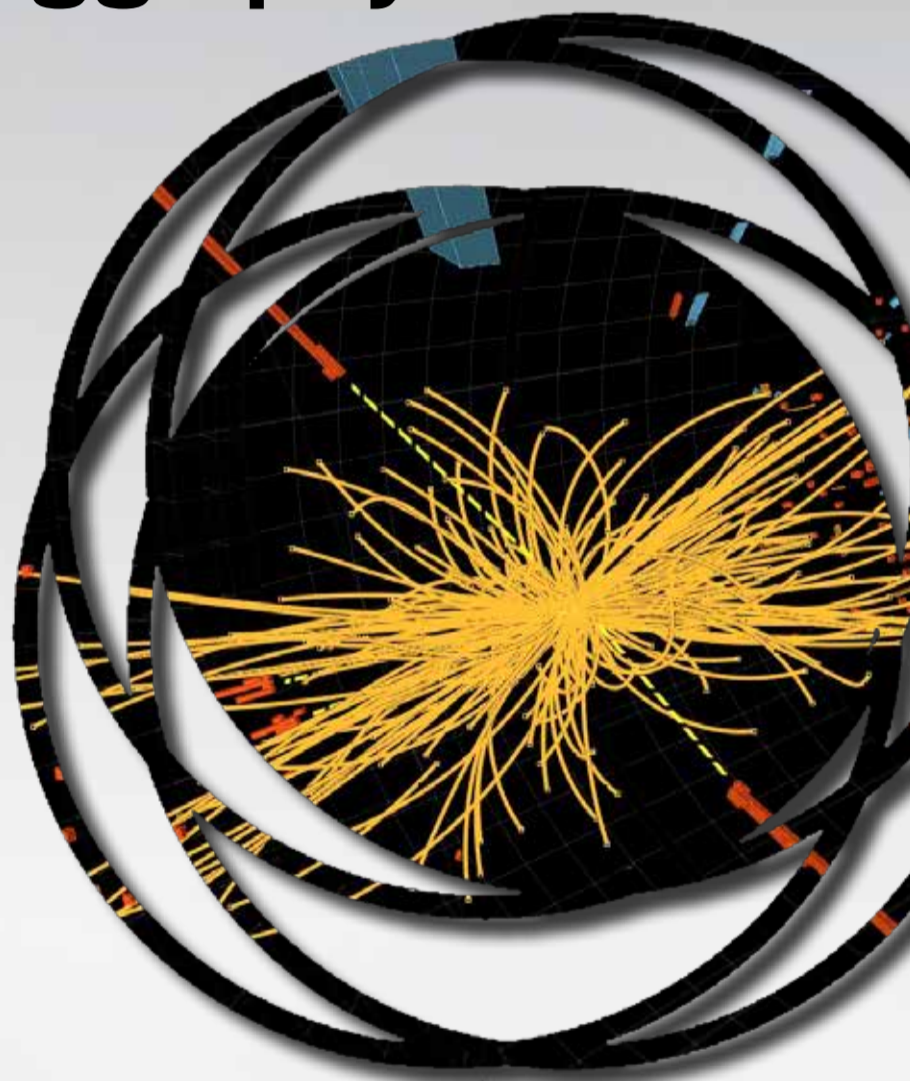
4th to 8th April, 2016

Bonn, Germany

The lecture course will start with a discussion of the Brout-Englert-Higgs mechanism of electroweak symmetry breaking and its relation to the quantum structure of the vacuum. Possible realisations of electroweak symmetry breaking within the Standard Model of particle physics, extended Higgs sectors and composite Higgs models will be presented, and their phenomenology will be highlighted. Our present knowledge about the signal that has been discovered at about 125 GeV will be summarised, and possible interpretations will be discussed. Prospects for the upcoming runs of the LHC and possible future colliders will be sketched. In this context also possible implications of the excess that was recently observed by ATLAS and CMS at about 750 GeV in searches in the two-photon channel will be discussed.

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Additional information and application form:

www.bctp.uni-bonn.de/bethe-forum