

Higgs and Beyond: Physics and Experiments at the International Linear Collider

Prof. Dr. Klaus Desch

Physikalisches Institut, Universität Bonn

The discovery of a Higgs boson at the LHC opened up an entirely new window for the exploration of physics at smallest distances and its connection to the big questions about the composition and history of our Universe. A linear electron positron collider at energies of 250-1000 GeV will be an invaluable tool for the discovery of new phenomena through precise measurements and searches for new particles highly complementary to the LHC.

In the talk, I will review the physics potential of linear colliders, the International Linear Collider ILC in particular, in view of the recent LHC data. I will also give an overview of the concepts for ILC precision detectors and their development status. The overall schedule towards the realization of the ILC in Japan will be briefly described.