

EINLADUNG ZUM  
**WIENER PHYSIKALISCHEN KOLLOQUIUM**

**THE QUEST FOR THE HIGGS BOSON  
AT THE LHC**

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In July 2012 ATLAS and CMS experiments reported the discovery of a Higgs-like boson, most likely confirming the mechanism for generation of mass of fundamental particles put forward in the 1960's. The physics behind this mechanism will be discussed drawing analogy with other physical phenomena. An outline of the challenges faced during the construction of both the LHC and the experiments will be presented as well as an overview of the operation and performance during the first run. Selected physics results and future aims, in particular those relating to the discovery of the Higgs-like boson, will be discussed.

**Montag, 6. Mai 2013, 17:30 Uhr**  
(ab 17:00 Uhr Kaffee)

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