

**FAKULTÄT für PHYSIK  
LUDWIG-MAXIMILIANS-UNIVERSITÄT  
MÜNCHEN/GARCHING**

**PHYSIK-DEPARTMENT  
TECHNISCHE UNIVERSITÄT MÜNCHEN  
MÜNCHEN/GARCHING**

## **MLL-KOLLOQUIUM**

**Donnerstag, 27.06.2019, 16<sup>15</sup> Uhr**

Hörsaal der LMU in Garching, Am Coulombwall 1  
Treffen zum gemeinsamen Kaffee 16 Uhr

**Dr. Christopher Wever**  
**(Physik Department T31, TUM)**

### **Precision physics: The tail of the Higgs**

The measurements of Higgs boson couplings form a crucial part of the LHC program and are essential for a better understanding of the electroweak symmetry breaking mechanism and the vacuum stability. As the only fundamental scalar particle, the Higgs plays also a special role in the Standard Model and can be used as a probe of New Physics. Up till now, no signals of beyond the Standard Model physics has been found and the search for deviations from Standard Model predictions is ongoing. This search and the future high-luminosity LHC run will usher in an era of precision physics for the Higgs. In this talk I will review the progress on Higgs coupling measurements and the corresponding theoretical calculations. In particular, I will also discuss the Higgs transverse momentum distribution, whose tail can put strong constraints.

gez. Peter Thirolf  
Tel. 289-14064

gez. Norbert Kaiser  
Tel. 289-12367