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IM GROBEN HÖRSAAL



AFTER THE DISCOVERY OF A HIGGS BOSON

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The discovery of a new particle in 2012 has been a milestone in particle physics. This great success is now being followed by the identification of the nature of this particle and the particle's properties are being measured. The first results conform so far with the assumption of the Higgs boson of the Standard Model of particle physics. However, many models going beyond the Standard Model can also describe such a particle.

In this talk, after a review of what has been discovered, I will discuss some consequences on the possible realization of these extended models as well as on possible deviations from the Standard Model. I will also comment on the precision of theoretical predictions and experimental measurements which is needed for a reliable test of the models.