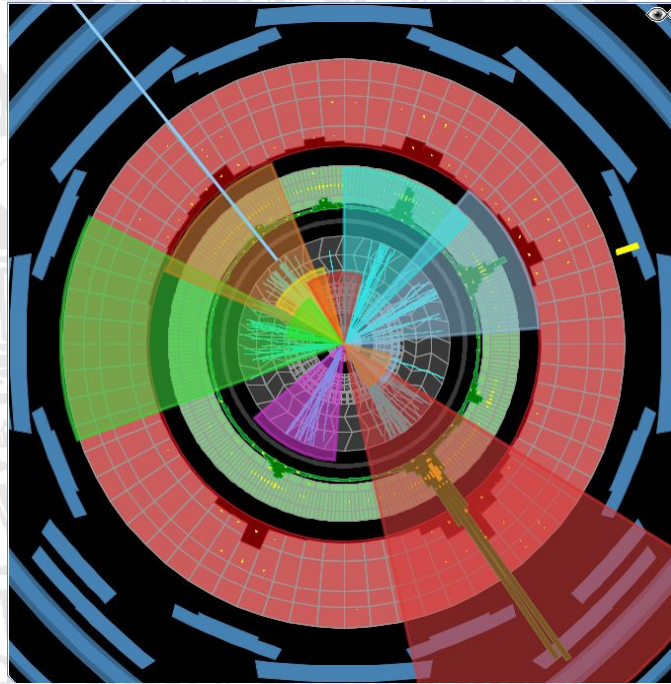


PHYSIKALISCHES KOLLOQUIUM

AM 5. DEZEMBER 2016 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



SEARCH FOR SUPERSYMMETRY AT THE LARGE HADRON COLLIDER

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The Standard Model of particle physics is the result of decades of efforts for the formulation of a formally consistent and experimentally sound theory of the electromagnetic, weak and strong interactions. It has demonstrated unprecedented successes in providing accurate experimental predictions and, with the discovery of the Higgs boson in 2012, also its last unknown input parameter has now been measured. It is however clear that the Standard Model does not give a complete description of the observed reality. New challenges come from experimental observations like Dark Matter and neutrino masses, and the amount of fine tuning of its parameters needed to describe the observed reality is regarded by many as a problem. Supersymmetry is one of the most searched-for extensions of the Standard Model, and the experiments at LHC are carrying on a large analysis effort to catch a glimpse of the new supersymmetric particles. A short overview of the latest results will be presented.