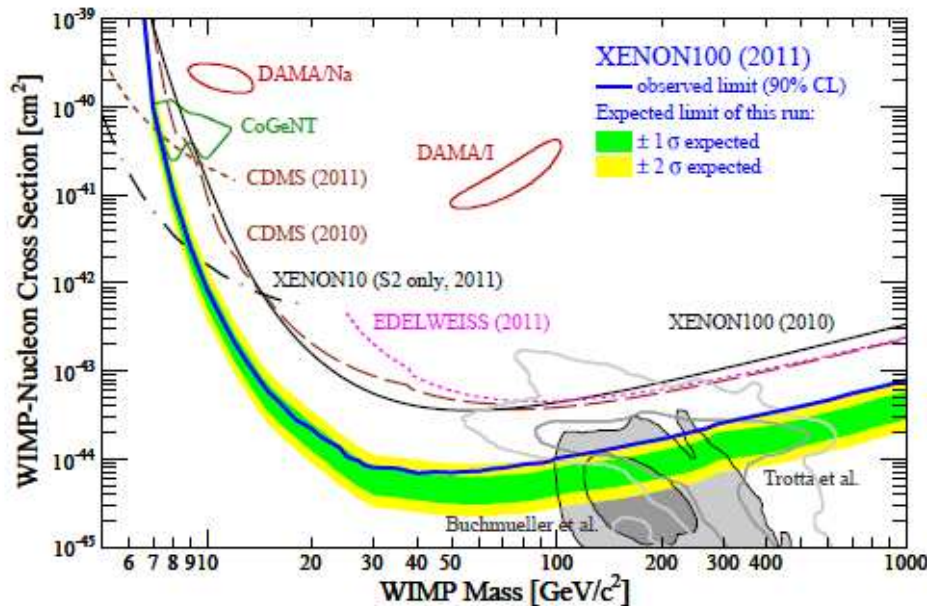


PHYSIKALISCHES KOLLOQUIUM

AM 9. JANUAR 2012 UM 17 UHR C.T.

IM GROßEN HÖRSAAL



RECENT CONSTRAINTS ON WIMP DARK MATTER FROM DETECTION AND PRODUCTION EXPERIMENTS

DR. SASCHA CARON

RU NIJMEGEN AND NIKHEF, NIEDERLANDE

This talk describes the recent constraints on weakly interacting massive particles (WIMPs) as candidates for Dark Matter using data from direct and indirect Dark Matter detection experiments and from the possible production of WIMPs at the Large Hadron Collider (LHC).

I will review the recent direct searches for WIMP scattering and the indirect detection methods via the annihilation or decay into other particles like neutrinos, electrons or photons.

Dark Matter can also be constrained at the LHC in various different scenarios, via indirect implications with models like Supersymmetry and Extra Dimensions or via a direct production of Dark Matter particles. I will shortly review the current status. I will also briefly mention possible implications on Dark Matter in certain models from the recently presented constraints on the Higgs mass.