

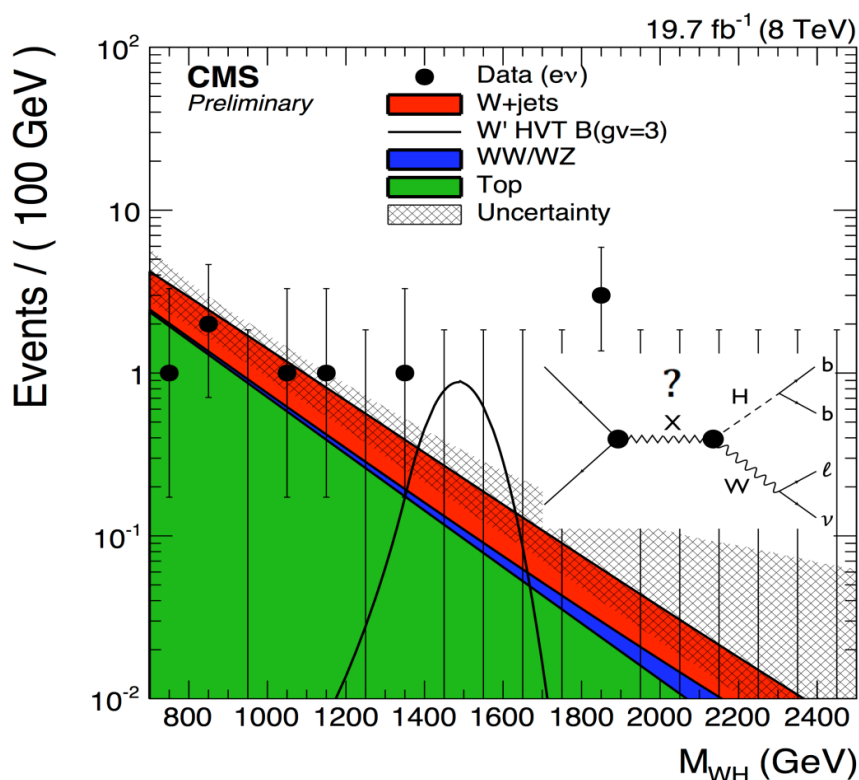


The Higgs as a probe for exotic new physics.

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Tuesday, 14 July 2015, 16:45 h, buildg. 1b, sem.room 4a+b

Since the discovery in 2012, the Higgs boson has become an important probe for new physics beyond the standard model. New physics models can be tested by measuring the properties of the Higgs boson and by looking for additional Higgs bosons (as in two-Higgs-doublet and SUSY models). Equally important is to check whether the production of Higgs bosons is enhanced due to the decay of exotic new particles (as in composite Higgs and extra dimension models). In this talk, the results of recent searches by the CMS collaboration for resonant production of exotic new particles decaying to Higgs bosons are presented. Novel experimental techniques for identifying Higgs boson with high momenta are explained. Finally, an outlook to new techniques developed for Run II of the LHC and expected sensitivity of the searches is given.



- Coffee, tea and cookies will be served at 16:30h
- After the seminar there is a chance for private discussions with the speaker over wine and pretzels

