

Higgs Couplings and BSM Physics

Experimental accuracies, physics requirements, theory & parametric systematics

Systematic survey of sensitivity to new physics through precision determination of Higgs couplings (ff, VV, invisible, trilinear) and total width;

Models: MSSM (19-par pMSSM) with contributions from M_A and SUSY loops,

light DM with invisible Higgs decays

SILH models

Compare BSM physics effects to expected accuracy at

LHC (14 TeV 300 fb⁻¹, 14 TeV 3000 fb⁻¹)

ILC (0.25+0.35 TeV 0.5 fb⁻¹, 0.5 TeV 0.5 fb⁻¹, 1 TeV 1 fb⁻¹)

and study effect of theory and parametric (m_b , m_c , α_s) uncertainties

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