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## Complementarity of LHC and EDMs for Exploring Higgs CP Violation

*Monday 4 May 2015 15:00 (15 minutes)*

We analyze the constraints on a CP-violating, flavor conserving, two Higgs doublet model from the measurements of Higgs properties and from the search for heavy Higgs bosons at LHC, and show that the stronger limits typically come from the heavy Higgs search channels. The limits on CP violation arising from the Higgs sector measurements are complementary to those from EDM measurements. Combining all current constraints from low energy to colliders, we set generic upper bounds on the CP violating angle which parametrizes the CP odd component in the 126 GeV Higgs boson.

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