Abstract Submitted
for the APR14 Meeting of
The American Physical Society

Search for the standard model Higgs boson in the $Z(ll)H(b\bar{b})$ channel using jet substructure INGA BUCINSKAITE, Univ of Illinois - Chicago, CMS COLLABORATION — A search for the standard model Higgs boson decaying to $b\bar{b}$ produced in association with a Z boson decaying to e^+e^- or $\mu^+\mu^-$ is presented. The search is performed with a data sample corresponding to an integrated luminosity of $19.7fb^{-1}$ at $\sqrt{s} = 8$ TeV, recorded by the CMS experiment at the LHC. Two techniques for reconstructing the Higgs candidate are discussed: the standard method using two jets reconstructed with the anti-kT algorithm, and a second technique using jet substructure that was developed for highly boosted massive particles.

Inga Bucinskaite
Univ of Illinois - Chicago

Date submitted: 10 Jan 2014 Electronic form version 1.4