



Contribution ID : 269

Type : Oral presentation

## Searches for production of two Higgs bosons using the CMS detector

*Saturday, 5 July 2014 12:05 (15)*

Searches for events containing two Higgs bosons are presented using several decay channels of the  $h(126)$  boson. The analyses use  $pp$  collision data recorded at centre-of-mass energies of 7 and 8 TeV, corresponding to integrated luminosities of 5/fb and 20/fb, respectively. Extended Higgs sector scenarios predict the resonant decay of new particles into a pair of  $h(126)$  bosons. These resonant di-Higgs processes are searched in different final states and the results are described.

### Summary

**Primary author(s)** : MEYER, Arnd (RWTH Aachen University)

**Presenter(s)** : Dr. BONDU, Olivier (CERN)

**Session Classification** : BEH Physics

**Track Classification** : Brout-Englert-Higgs physics