



Contribution ID: 122

Type: **Oral presentation**

## Higgs boson as a gluon trigger

*Thursday 1 May 2014 09:40 (20 minutes)*

In the forthcoming high-luminosity phase at the LHC, many of the most interesting measurements for precision QCD studies are hampered by conditions of large pileup, particularly at not very high transverse momenta. We study observables based on measuring ratios of color-singlet currents via Higgs boson and Drell-Yan production, which may be accessed also at large pileup, and used for an experimental program on QCD physics of gluon fusion processes in the LHC high-luminosity runs. We present results of Monte Carlo calculations for a few specific examples.

**Primary author:** VAN HAEVERMAET, Hans (University of Antwerp (BE))

**Co-authors:** GREBENYUK, Anastasia (Universite Libre de Bruxelles (BE)); HAUTMANN, Francesco (Institute of Theoretical Physics); JUNG, Hannes (Deutsches Elektronen-Synchrotron (DE)); KATSAS, Panagiotis (Deutsches Elektronen-Synchrotron (DE)); GUNNELLINI, Paolo (Deutsches Elektronen-Synchrotron (DE)); RIBEIRO CIPRIANO, Pedro Miguel (Deutsches Elektronen-Synchrotron (DE)); DOOLING, Samantha Katherine (Deutsches Elektronen-Synchrotron (DE))

**Presenter:** VAN HAEVERMAET, Hans (University of Antwerp (BE))

**Session Classification:** WG4: QCD and Hadronic Final States

**Track Classification:** WG4: QCD and Hadronic Final States