



Contribution ID: 137

Type: **not specified**

## Weak boson production via vector-boson fusion @ NLO matched with POWHEG

*Tuesday 8 May 2012 14:30 (15 minutes)*

### Abstract:

The production of weak vector-bosons in association with two jets is not only an important background to Higgs-boson searches in vector-boson fusion (VBF) at the LHC, as a signal process it also offers the possibility to investigate the central jet veto. In order to make reliable predictions, the combination of fixed-order NLO-calculations and parton-showers is indispensable. We present the implementation of the weak boson production via VBF in the POWHEG BOX and show some preliminary results. This is a first step towards interfacing VBFNLO, a fully flexible Monte Carlo program, with the POWHEG BOX.

**Author:** SCHISSLER, Franziska (KIT, Karlsruhe)

**Co-authors:** Dr OLEARI, Carlo (Universita' di Milano-Bicocca); Prof. ZEPPENFELD, Dieter (KIT, Karlsruhe)

**Presenter:** SCHISSLER, Franziska (KIT, Karlsruhe)

**Session Classification:** QCD/Tools