

COSTAction: VBSCan

Les Houches workshop (05/06-14/06)

Mini-report of activities



29th June 2017

Mathieu Pellen

1) Activities/Plan:

- Contributions of EWK process, interference, and QCD induced process in different region of $\Delta\eta_{jj}$ and m_{jj} (LO without PS).
→ Definition of “signal” and “control” regions.
- Off-shell and interference effects in these regions (LO without PS).
- Precision of the VBS approximation for NLO calculations (using information of the interference).
- Study of taking ratios between “signal” and “control” regions (some uncertainties cancels?).
- [(maybe) effect of VBS W^+W^- as background to $H \rightarrow W^+W^-$].

Process studied: $pp \rightarrow jj W^+Z$ and if time $pp \rightarrow jj W^+W^-$.

2) Practical info:

- Participants:
Vitaliano Ciulli, Kenneth Long, Efe Yazgan, Simon Plaetzer, Carlo Pandini, Reina Camacho toro, Mathieu Pellen, Marco Zaro, ... **YOU?**

If you want to join please send an email to:
me (mpellen@physik.uni-wuerzburg.de) and Kenneth (kdlong@wisc.edu)

- Activities will start soon.
- Activities on the BSM session of Les Houches?