

# LHC EW WG 2: Jets and EW bosons

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- Conveners:
  - ATLAS: Ben Nachman, Heberth Torres
  - CMS: Vieri Candelise, Hannes Jung,
  - LHCb: Stephen Farry, Will Barter
  - TH: Marek Schoenherr
  
- further reading: [WG Twiki](#)

# Welcome Vieri

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- Vieri Candelise (CMS) replaces Anastasia Grebenyuk, who is on maternity leave
- Vieri is expert in MC tuning and MC comparison

**A very warm welcome, Vieri !**

# Jets and EW bosons: Proposals for work

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- define small projects
  - find people to work on
  - from every experiment/theory we need people to join
  - need names and commitments
- if we do not find people, we have to cancel topic

# Jets and EW bosons: Benchmark Comparisons (1)

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- use NNPDF3.1 pdf, CUETp8M1 tune (or something different ?)
- Jets, W+jets, Z+jets
  - POWHEG
    - dijet at NLO (**1.1**)
      - effect of MPI (MPI on/off)
      - compare inclusive jets with POWHEG for different hdamp params
      - PS on/off
    - trijet with MiNLO (**1.2**)
      - role of hdamp ?
      - PS on/off

# Jets and EW bosons: Benchmark Comparisons (2)

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- use NNPDF3.1 pdf, CUETp8M1 tune (or something different ?)
- Jets, W+jets, Z+jets
  - MCatNLO
    - dijets at NLO (**2.1**)
      - effect of MPI ?
      - compare with different merging scales
      - PS on/off
    - 2+3 jets at NLO (FxFx) (**2.2**)
      - merging scales ?
      - PS on/off
    - 2+3+4 jets at NLO (**2.3**)
      - merging scales
      - PS on/off

# Jets and EW bosons: Benchmark Comparisons (3)

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- use NNPDF3.1 pdf, CUETp8M1 tune (or something different ?)
- Jets, W+jets, Z+jets
  - Sherpa (in POWHEG or MCatNLO mode ?)
    - dijets at NLO (**3.1**)
      - effect of MPI
      - merging scales ?
      - PS on/off
    - 2+3 jets at NLO (**3.2**)
      - PS on/off
    - 2+3+4 jets at NLO (**3.3**)
      - PS on/off

# Jets and EW bosons: infos

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- Discussion on storing uncertainties (correlation) on HepData is ongoing:
  - Proposal is ready
  - Louie has already scheduled presentations in CMS and LHCb
  - in November collect all comments
    - final Recommendations for December meeting
- LHC tune → talk by Vieri today
- Preparation of meeting **17-18 Dec 2019**
  - need results :) and speaker



# Jets and EW bosons

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- Further reading
  - [Twiki](#)
  - [regular meetings](#): every second week, Tuesdays 16-18




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# WG 2: Agenda for today

## LHC-EW WG: Jets and EW bosons

 Tuesday 22 Oct 2019, 16:00 → 18:10 Europe/Zurich

 CERN

Videoconference  
Rooms

 LHC-EW\_WG\_\_Jets\_and\_EW\_bosons

Join 

16:00 → 16:10 **Intro**

🕒 10m



16:10 → 16:30 **Impact of tunes on high pt jet and boson measurements**

🕒 20m



Speaker: Dr Vieri Candelise (Universita e INFN Trieste (IT))

16:30 → 16:50 **Inclusive jets measurements in ALICE (postponed)**

🕒 20m



Speaker: Eliane Epple (Los Alamos National Laboratory (US))

# Appendix

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