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# Top analyses short of manpower in run 2

Below are the high-profile top analyses that are high-priority to be done with the run 2 data, but either have insufficient or no manpower.

- Additional jets in tt events: e.g. gap fraction measurement.
  - ◆ Important QCD measurement to help understand top modelling and background to new physics searches.
- ttV cross-section measurement.
  - ◆ Rare process that was just seen at the end of run 1 - run 2 gives a significant boost in the cross-section.
- Differential cross-section measurements of ttbar production: boosted and resolved.
  - ◆ Vital to understand the modelling of ttbar events - in particular the top pT measurement, which was not well modelled in run 1.
- Charge asymmetry (resolved) l+jets and dilepton.
  - ◆ Run 2 allows to explore to higher ttbar invariant mass and investigate potential new physics contributions.
- Single-top associated Wt production cross-section measurements.
  - ◆ Observed for the first time at the LHC run-I. The increase of the cross-section at 13TeV should allow to perform precision measurements for total and fiducial cross-section, and could open the possibility to perform differential cross-section measurements.
- Top mass measurements - all channels / methods.
  - ◆ One of the fundamental parameters of the SM that can be measured at the LHC. The huge statistics in run 2 open up possibilities for classic measurements and also new ideas.

If you are interested, please contact Alison and Mark.

-- MarkOwen - 2015-06-04

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This topic: [Sandbox > DraftUncoveredTopAnalyses13TeV](#)

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