

- It's hard to extrapolate from (14 TeV, 100fb⁻¹) to (14 TeV, 1ab⁻¹). It's even harder to do it from (7 TeV, 10fb⁻¹) to (14 TeV, 1ab⁻¹).

LHC upgrades, discussion

- It's hard to extrapolate from (14 TeV, 100fb⁻¹) to (14 TeV, 1ab⁻¹). It's even harder to do it from (7 TeV, 10fb⁻¹) to (14 TeV, 1ab⁻¹).
- However higher $\int L$ is desirable no matter what. Some returns are predictable, others are not. Tevatron is a good example.

- It's hard to extrapolate from (14 TeV, 100fb⁻¹) to (14 TeV, 1ab⁻¹). It's even harder to do it from (7 TeV, 10fb⁻¹) to (14 TeV, 1ab⁻¹).
- However higher $\int L$ is desirable no matter what. Some returns are predictable, others are not. Tevatron is a good example.
- To precisely quantify its impact requires
 - concrete scenarios
 - light H or heavy H? SUSY or little Higgs?
 - specific questions
 - required fwd jet efficiency and E resolution?
 - required MET resolution?
 - $\langle E_T^{\text{jet}} \rangle$ of interest? b-tagging needed?
 - ...

LHC upgrades, discussion

- It's hard to extrapolate from (14 TeV, 100fb⁻¹) to (14 TeV, 1ab⁻¹). It's even harder to do it from (7 TeV, 10fb⁻¹) to (14 TeV, 1ab⁻¹).
- However higher $\int L$ is desirable no matter what. Some returns are predictable, others are not. Tevatron is a good example.
- To precisely quantify its impact requires
 - concrete scenarios
 - light H or heavy H? SUSY or little Higgs?
 - specific questions
 - required fwd jet efficiency and E resolution?
 - required MET resolution?
 - $\langle E_T^{\text{jet}} \rangle$ of interest? b-tagging needed?
 - ...
- Possible tasks for this Workshop:
 - identify, in light of the 2011-12 LHC data, scenarios on which to focus the realistic simulations: have the data added important constraints of relevance for the physics case of the HL-LHC?
 - If so, identify the key questions to be addressed in the detailed simulations
 - attempt a first assessment of the HE- vs HL- benefits: are we 2011-12 data adding useful info to this question?