

# BSM1 Discussion Questions

- 1) Is there a place that we are not covering well? Is it because of fashions, lack of triggers, or otherwise?
  - How to target the compressed region, or degeneracies (e.g.  $m_{\text{stop}} \sim m_{\text{top}}$ )
  - Inclusion of soft leptons from quasi-degenerate higgsino LSPs?
- 2) How confident are we in the modeling and performance of high  $p_T$  / boosted objects at 14 TeV?
  - What if we see a resonance at mass not equal to  $m_W$  or  $m_{\text{top}}$   $\rightarrow$  are we confident that it is real?
  - Modeling of accidental substructure leading to broad differences in mass distribution?
  - Extrapolation to high  $p_T$  and high PU?
- 3) What blinding strategy should we pursue in the future? Should ATLAS and CMS agree on a common policy?
- 4) At 14 TeV, the spotlight will be on high masses  $\rightarrow$  how much emphasis should the experiments place on lower masses?

# BSM2 Discussion Questions

- 1) The standard question: is there a place that we are not covering well? Is it because of fashions, lack of triggers, or otherwise?
- 2) If the galactic center signal is the DM annihilating, what is the best way of looking for it at colliders?
  - And what is the best way to put constraints on the mediator?
- 3) How applicable is EFT when extrapolating collider results to limits in the DM  $\sigma$  vs.  $M$  plane?
  - How should we treat this in the future (e.g., simplified models)?
  - Do different models require different search strategies/selections?
- 4) What range of neutralino DM masses is NOT excluded by our current results, and how do we target these holes?