

# Difficult topologies

Discussion session  
FastSim for LHC Workshop  
12/6/12

- What are the (most) difficult topologies? (detector/reconstruction)
  - Exotics
  - Jet substructure
  - What topologies have users had trouble with?
  - How do these interplay with common missing features like pile-up?
- What additional features would we like to see?
  - Modularity!
- What are the shortcomings of current tools?
  - How do these tools compare?
- Where could/should current tools be improved?
  - Do difficult topologies require more complicated output? (E.g., a jet is more than a four-momentum.) Can/should this be standardized?