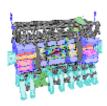




## Outline for writeup of QCD group



## **Outline**



- Introduction/motivation
- 2. PDF's:tools and issues
  - 1. fastNLO
  - 2. LHAPDF
    - pdf reweighting
    - Sudakov FF's
  - $\alpha_{\rm s}$  CTEQ  $\alpha_{\rm s}$  series and CTEQ7
  - use of NLO pdf's (MC's)
- 3. Monte Carlo parameters
  - underlying event tuning at the Tevatron
    - Pythia and Jimmy
    - 2. CTEQ6.1
  - extrapolation to the LHC: predictions and uncertainties
- 4. Matrix element/parton shower tools
  - W+jets: CKKW/MCFM comparisons to data
  - extrapolation to the LHC: backgrounds to VBF
  - 3. Samper case study: Higgs + 2 jets
- 5. Jet production
  - MC@NLO: inclusive jet production
  - jet algorithms:advice for the LHC
- 6. Diffraction
- 7. White paper on remaining measurements at the Tevatron
- 8. SM Benchmarks for the LHC
  - relation to Tevatron measurements
- 9. Conclusions