## Search for Single Top Quark Production

- Significance of observation of single top signal
  - Measured in # of standard deviations
    - Assuming experiments measure an excess of events over background that corresponds to the standard model single top cross section
  - Estimate is based on recently published DØ search
    - Using neural networks and binned likelihood on 230pb<sup>-1</sup>
- Extrapolate sensitivity of the analysis to larger datasets
  - Assuming no change to analysis procedure or efficiencies or resolutions
- Ignoring systematic uncertainties and expected analysis improvements

