

# Comparison of Data with Background Calculation

Muon spectrometer hits are expected to be dominated by background with a small component due to true (high- $p_T$ ) muons. It is important to understand this background under present conditions and to extrapolate with confidence to design luminosity. We have undertaken a major effort to calculate this [background](#). The results can be confronted with data from the muon spectrometer in the early 2010 running.

We will be using data from all the muon detectors: MDT, RPC, TGC and CSC. In addition, we will use data from the MPX detector. Comparisons will check the counting rates, spatial distributions, etc.