

A parameterized CDF simulation CDF for m_W

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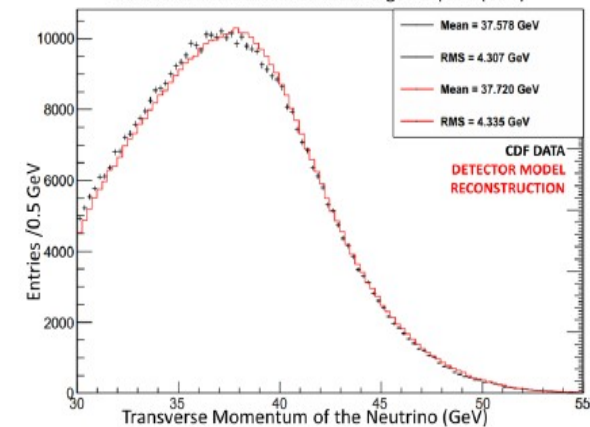
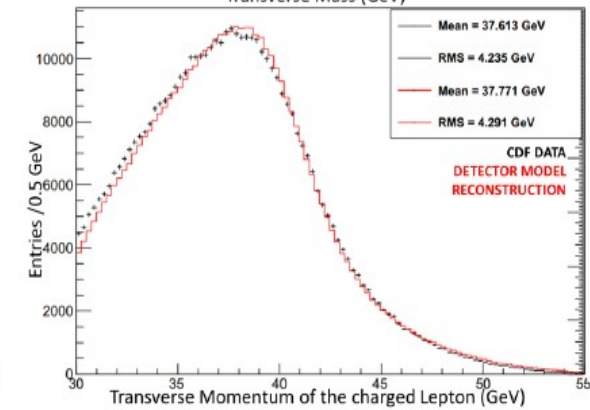
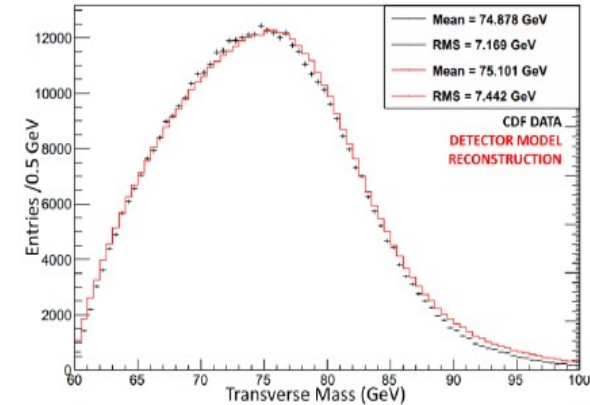
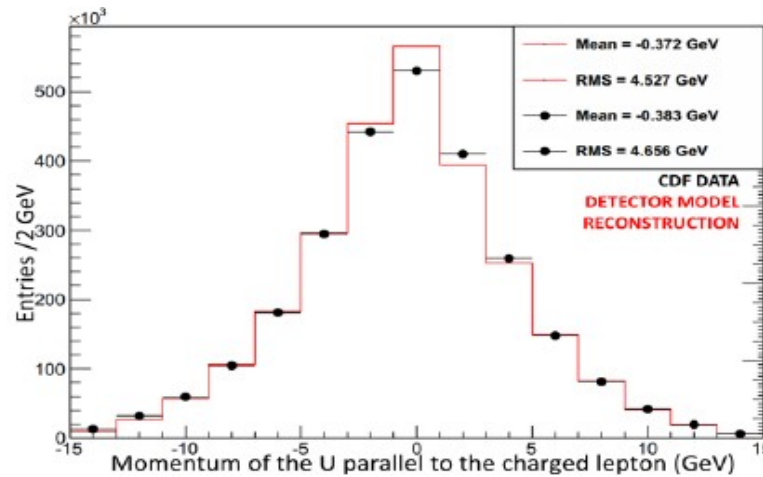
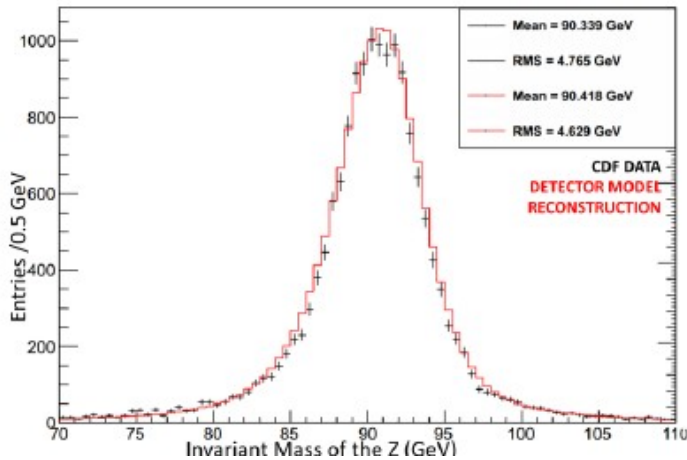
LHC + Tevatron combination discussion
9 November 2018

History and status

- A series of undergraduates have iteratively produced a parametric simulation based on that used for the CDF W mass measurement
- The aim has been to quickly study the uncertainties from different PDFs, generators, and cuts
- A first version was written up a few years ago as an M Phys report and will be described today
- Further progress has been made in developing the parametric model
- A new student will retune to the 2/fb data using the current model
- An approximate set of parameter values could be provided now

Plots

- Approximate model of data gives reasonable estimate of PDFs (based on comparisons to full fast simulation used for CDF measurement)



- Events generated with Powheg for these plots
- Now using Madgraph + Pythia