Work report

Peilian Li

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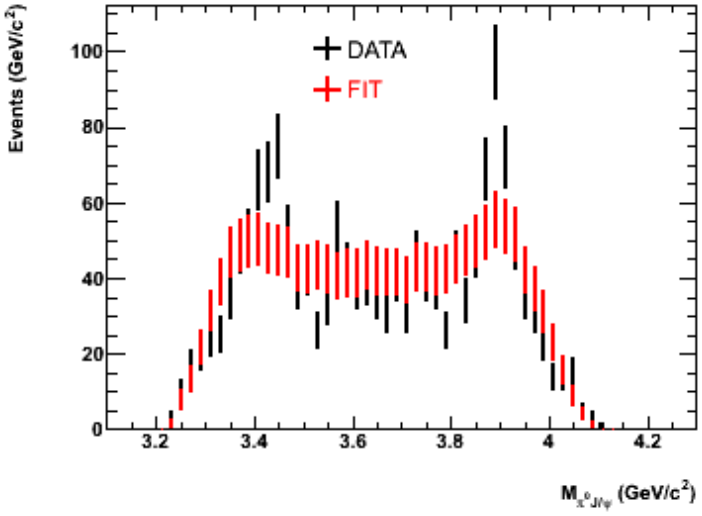
Part 1. TMinuit fit

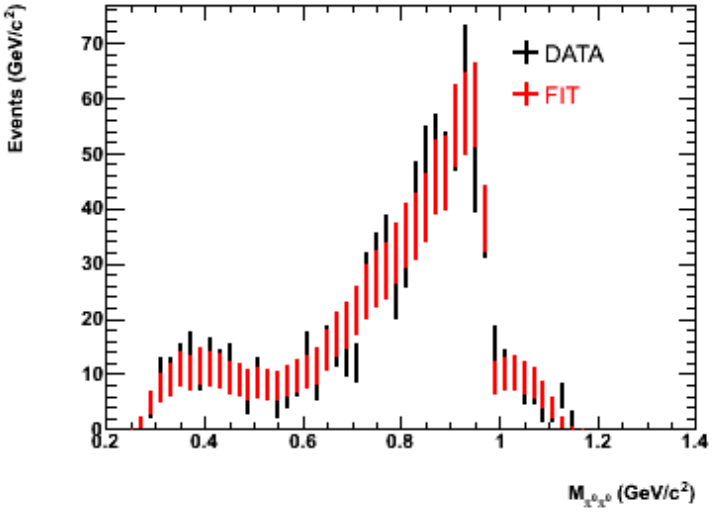
- Migrad: in general the best minimizer for nearly all functions. Its main weakness is that it depends heavily on knowledge of the first derivatives
- Hesse: calculates the full second-derivative matrix of the user function FCN using a finite difference method
- Minos: perform a MINOS error analysis, obtain asymmetry errors

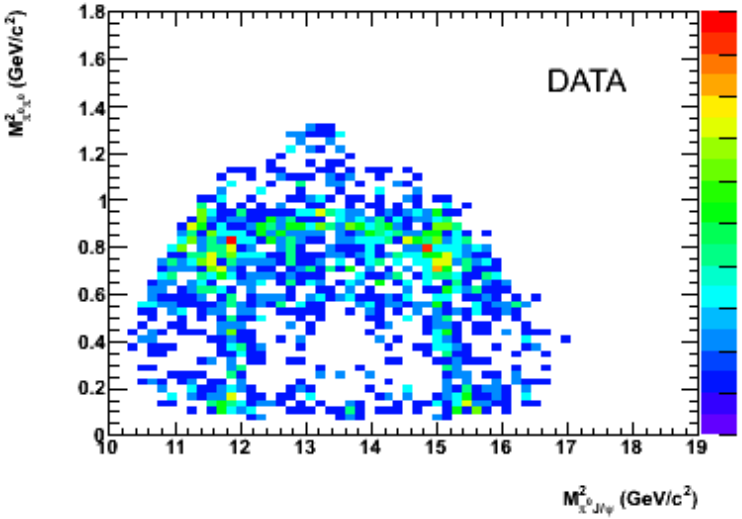
Tips: use (at least) Hesse to evaluate reliable error matrix for a given fit result. Minos will give th e best estimate of the errors of a given set of parameters.

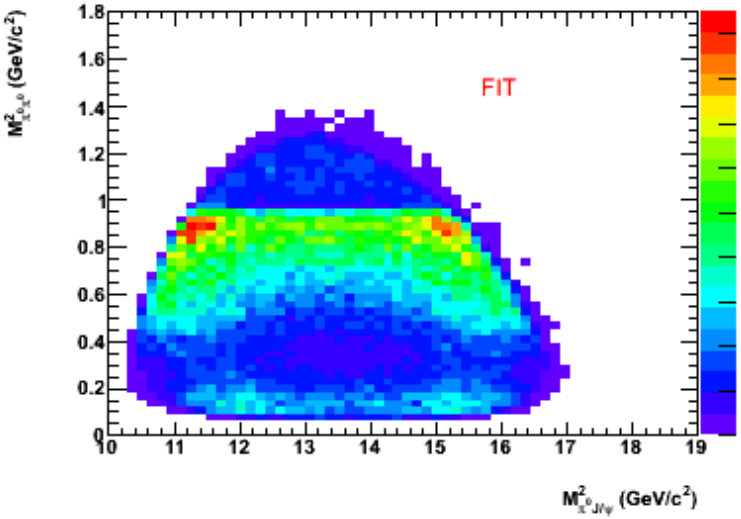
PWA results

Float Zc(3900) parameters Mass and width



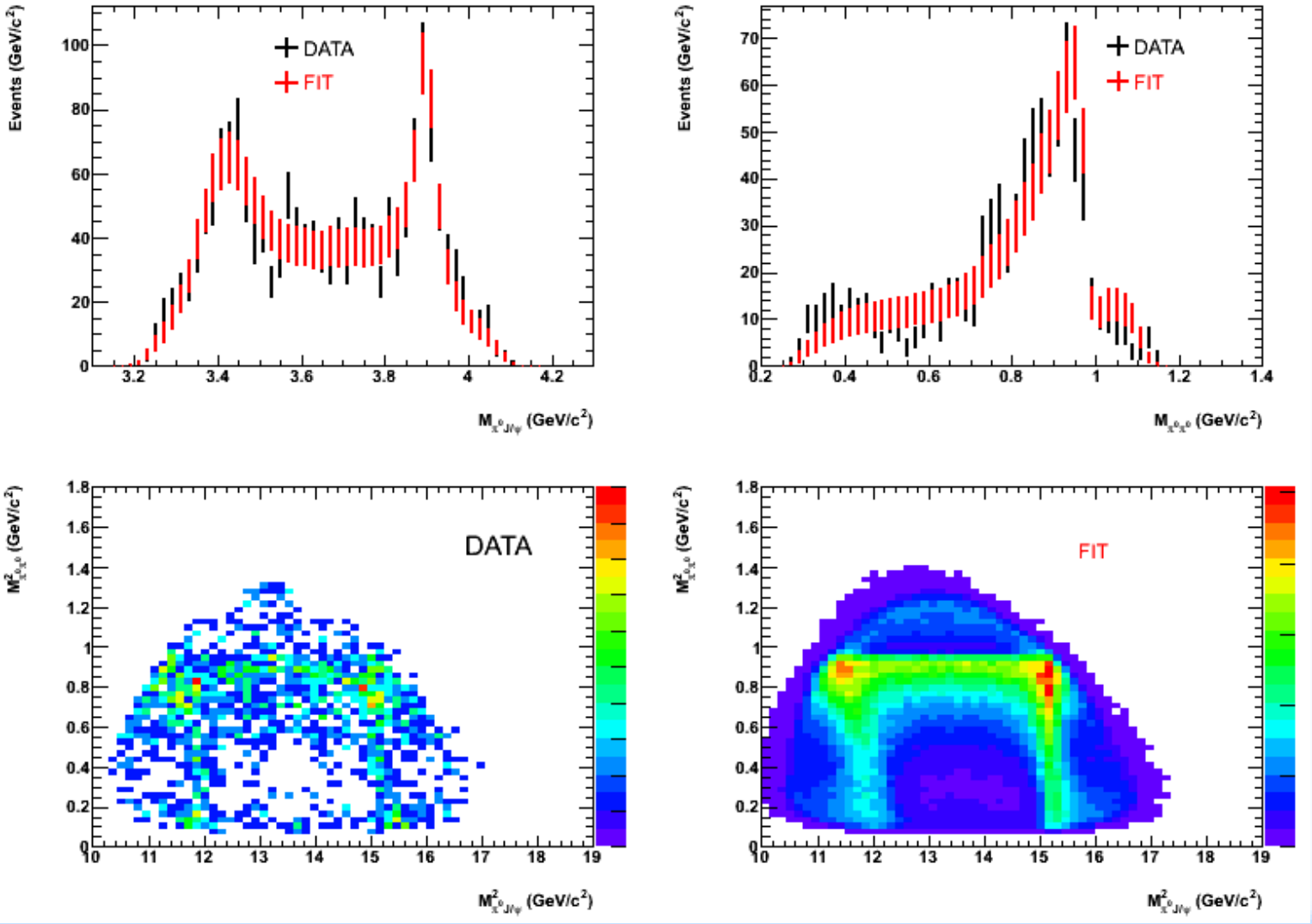






PWA results

Fix Zc(3900) parameters at Mass=3.8983 GeV, Width=0.051392 GeV

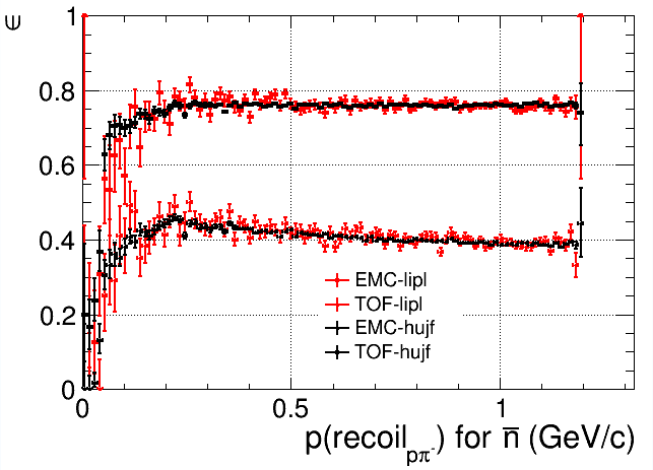


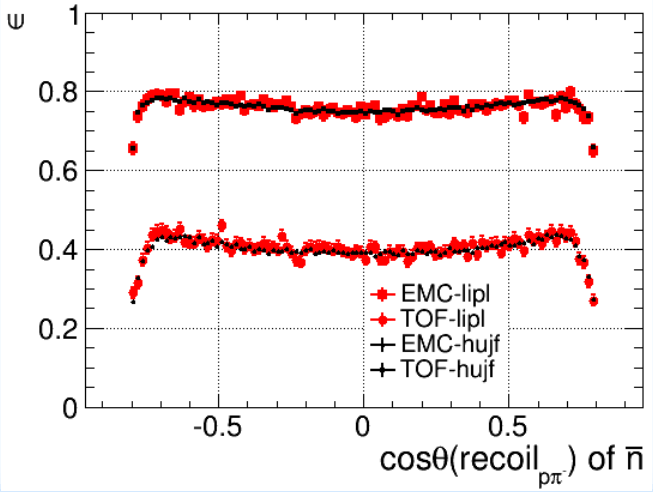
Part 2. TOF reconstruction

- Check runNo/event in multi-input (raw, dst)
- Shower selection (the maximum energetic shower)
- Control sample selection
- Recoiled direction as input for TOF reconstruction
- Update Note for this method

Efficiency compare with Hujf

- pnbarpi sample from lipl
- pnbarpi sample from hujf





- Results from lipl (lipl's sample)
- Results from hujf (lipl'sample)