

My CERN Summer Project Work in Progress

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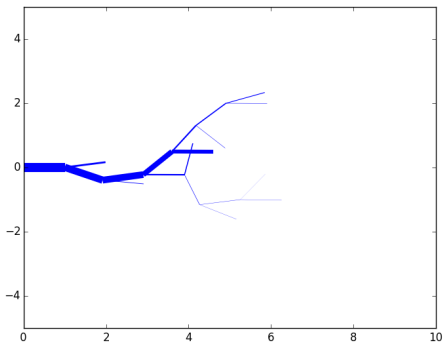
Projects until now

- Programming a simple Monte Carlo simulation
- W mass comparison in Monte Carlo and data

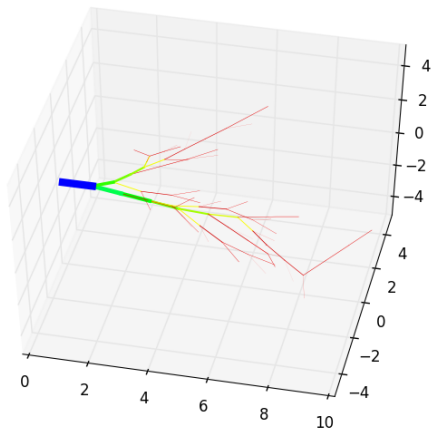


Toy Monte Carlo

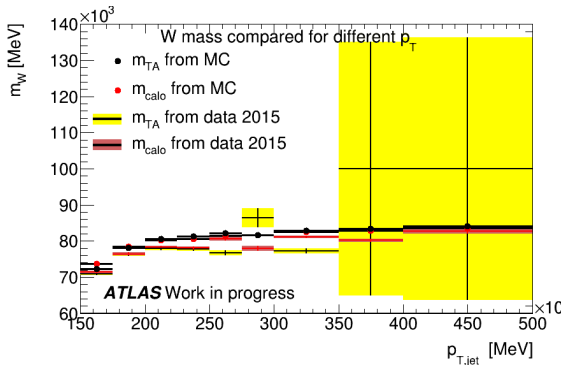
- created parton shower implementing conservation of energy and momentum
- programmed calorimeter to measure created shower at screen
- applied jet clustering algorithm (anti- k_T)



Toy Monte Carlo



W mass comparison



- got $t\bar{t}$ background and subtracted it from MC and data
- fitted W mass peak and plotted fitted mean with error

