

# Global Fitting

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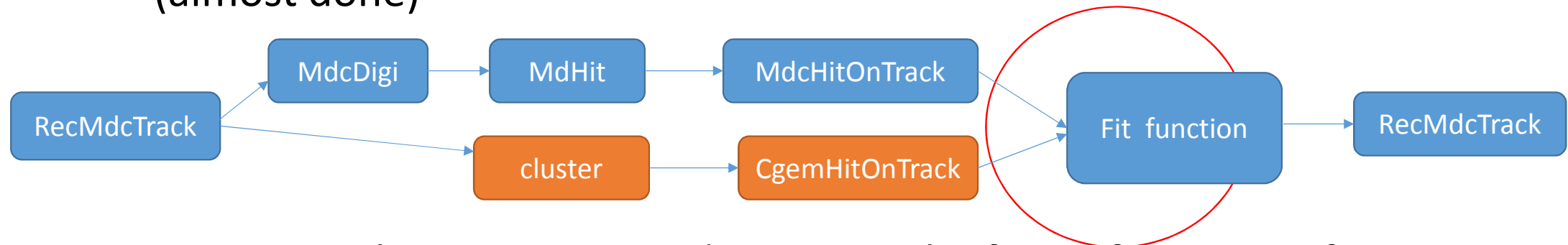
# motivation

- Create a new fitting package ([CgemMdcFitAlg](#)) that fit tracks which contain ODC hits and CGEM clusters.
- Take the track reconstruction results ([RecMdcTrack](#)) which contains hit list and helix initial parameters of a track as input, and output the fitting result([RecMdcTrack](#))
- Can still work in case of without CGEM



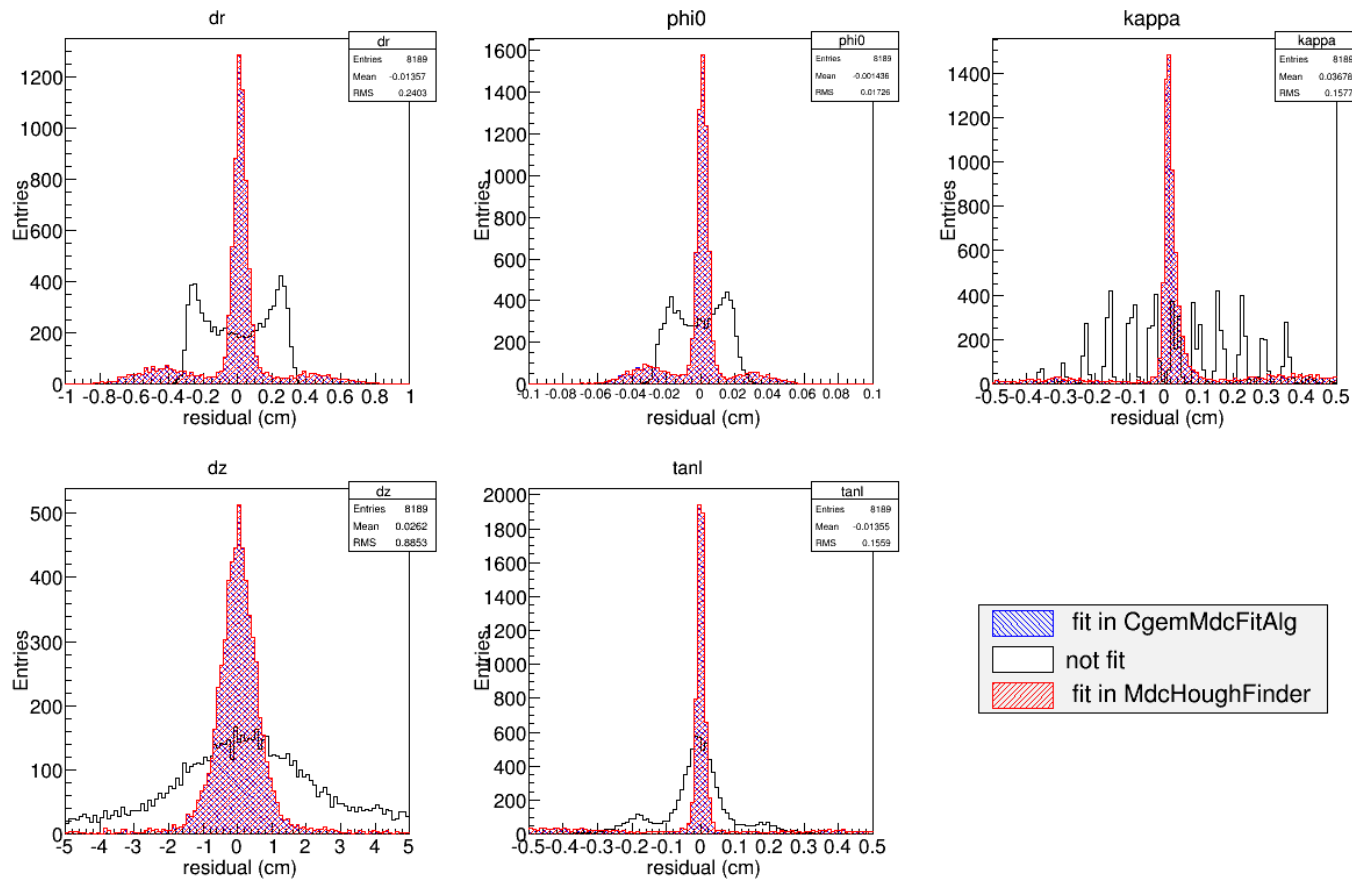
# Algorithm

- For MDC hits, it invoke the fitting functions of MdcPatRec package (almost done)



- For CGEM clusters, we intend to extent the fitting functions of MdcPatRec package to deal with the CGEM clusters.(next to do)

# Fitting Result of ODC Hits



Sample :  
10000 Events of fix Pt muon  
reconstructed by MdcHoughFinder  
Momentum: 1Gev/c  
dr cut : 3cm  
dz cut : 30 cm  
Hit number cut: 9

Note: we take single reconstructed tracks into account only