Action Items for Local Hadron Calibration

ATLAS workshop on refinement of local hadron calibration and its application to top physics

Sven Menke   11.-14. June 2008, Ringberg

► Clustering and Noise

- check impact of change of thresholds by comparing simulations with and without Pile-up with and without reco thresholds adjusted to Pile-up
- study splitter with stricter veto on hadronic samplings for secondary local maxima

► Classification:

- use effective hadronic weight as indicator

► Jet-level corrections:

- disentangle jet-level from cluster-level corrections with calibration hits / with tracking
- keep local cluster correction really local (lost energy should not include entirely lost particles)
- lost particles will be accounted for in the jet-level corrections
- continue with the development of jet-level calibration schemes with energy flow/jet shape/constituent based methods

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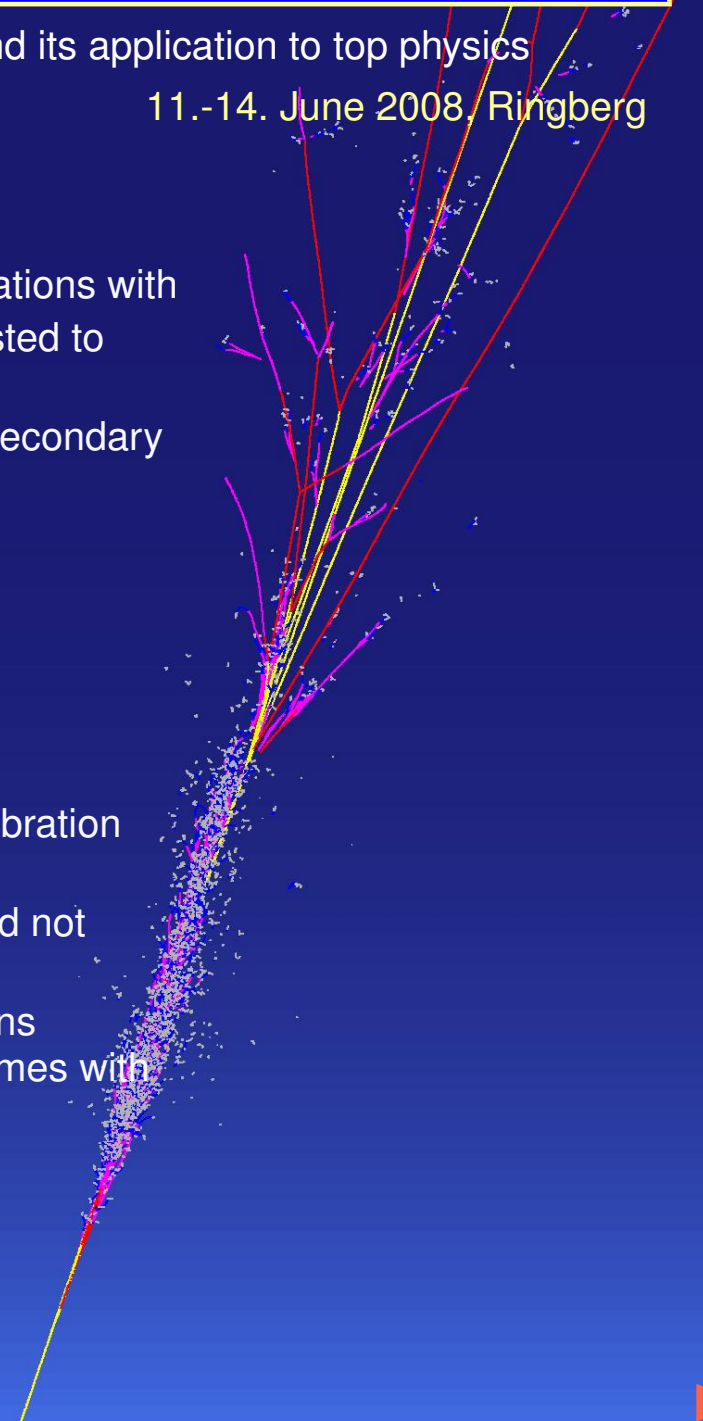
► In-Situ methods

- extract reco performance in parralel from data and simulation to check individual steps
- use (cluster/jet) shape info to discriminate/enhance impact from individual steps
- prepare list of cluster moments to group single pion events (or isolated track regions from min bias events) in to be sensitive to different steps of local had calib
- study track fraction inside jets vs. misscalibration (correlated with some jet/cluster moment?)

► FDR2 data

- start using FDR2 data now to test/implement in-situ methods