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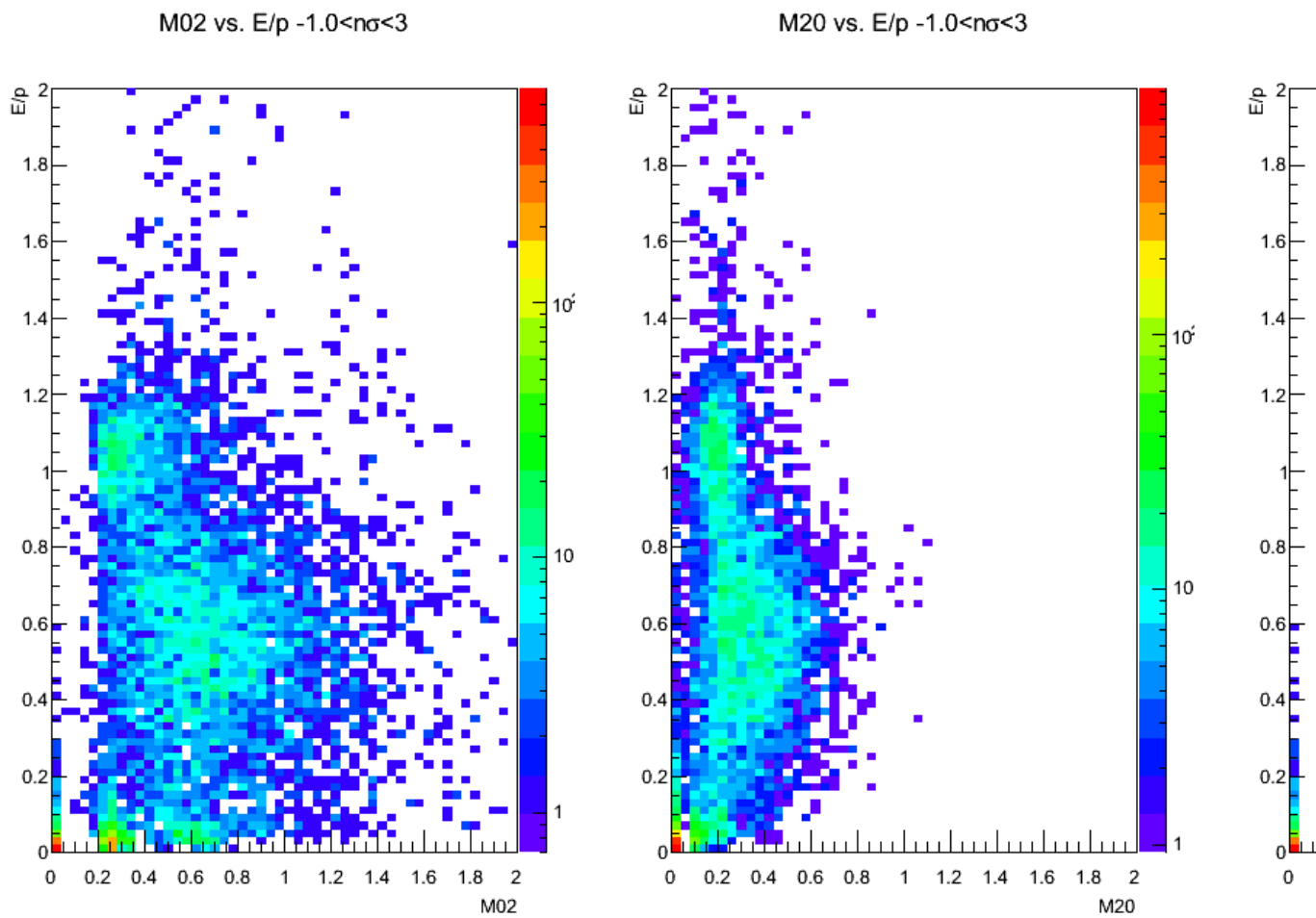
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Overview

- high electron identification with shower shape
- electron ID cuts
 - ◆ # of cluster > 100
 - ◆ # of ITS ; 3
 - ◆ $-1 < n\sigma < 3$
 - ◆ TPC, ITS refit
 - ◆ TPC cluster ratio ; 0.6
 - ◆ SPD hits ; kAny
 - ◆ Centrality ; 0-10%

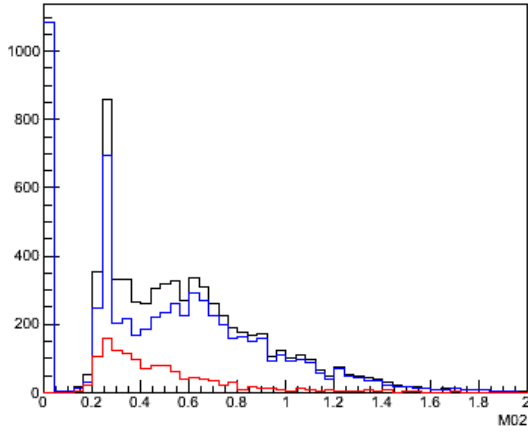
Shower shape

- E/p vs. Shower Shape ($p_T > 10$ GeV/c)

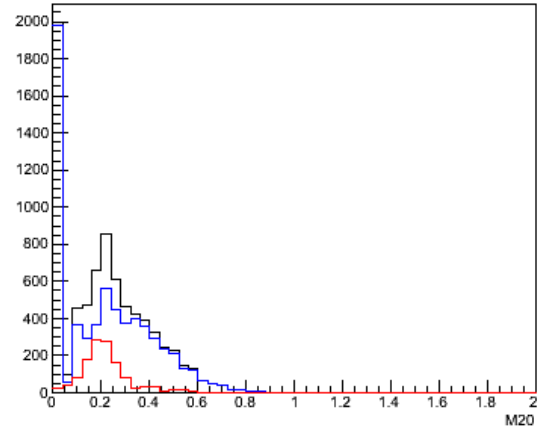


- Shower shapes with different E/p cut
 - ◆ E/p > 0.9 (red) --- electron candidate
 - ◆ E/p < 0.9 (blue) --- hadrons

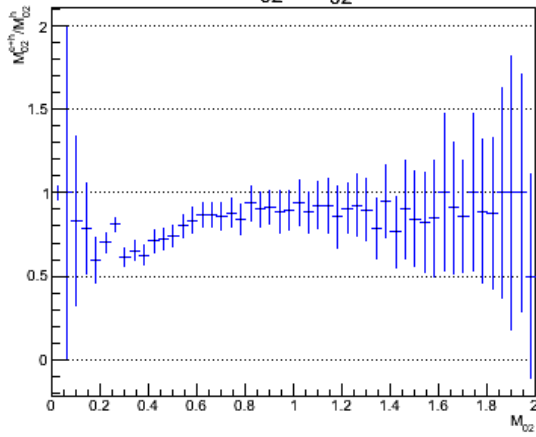
M02 vs. E/p $-1.0 < n\sigma < 3$



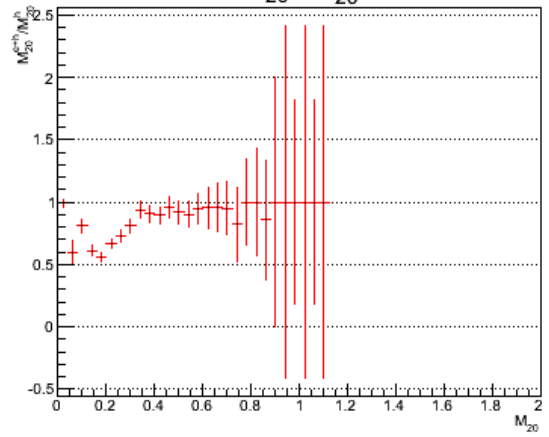
M20 vs. E/p $-1.0 < n\sigma < 3$



M_{02}^{e+h}/M_{02}^h

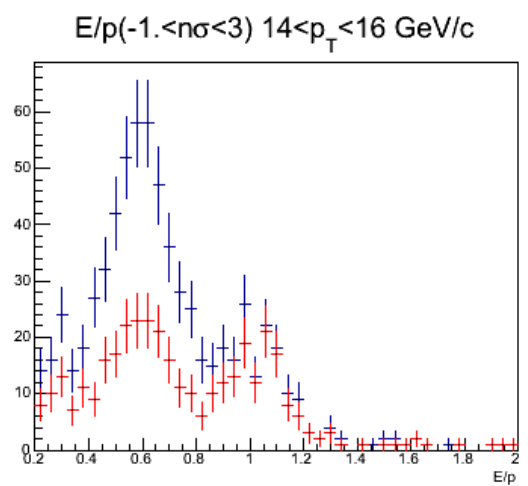
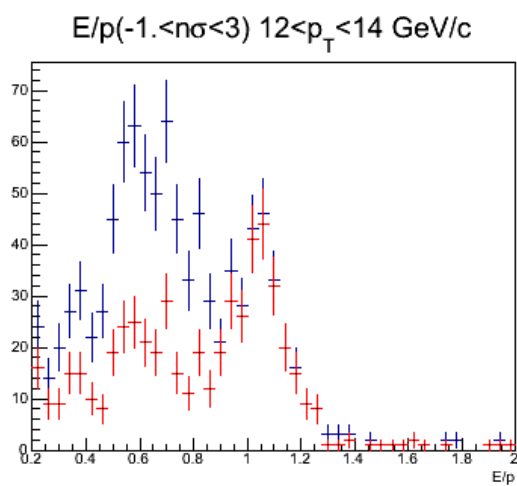
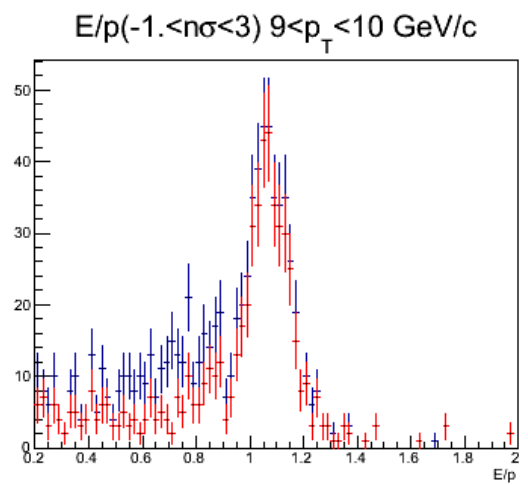
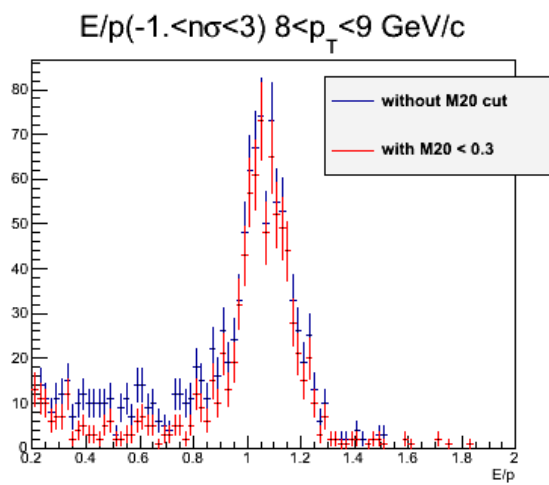


M_{20}^{e+h}/M_{20}^h



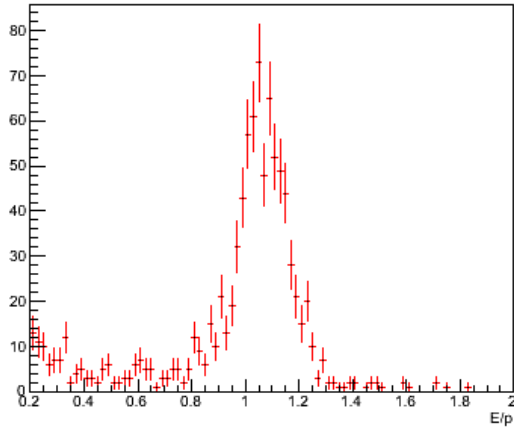
E/p

- E/p distribution with/without M20 cut

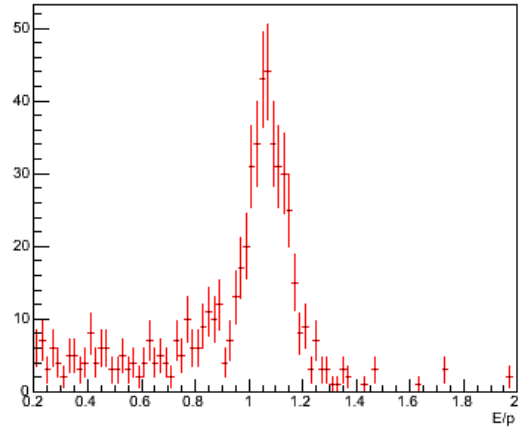


- E/p distribution with M20

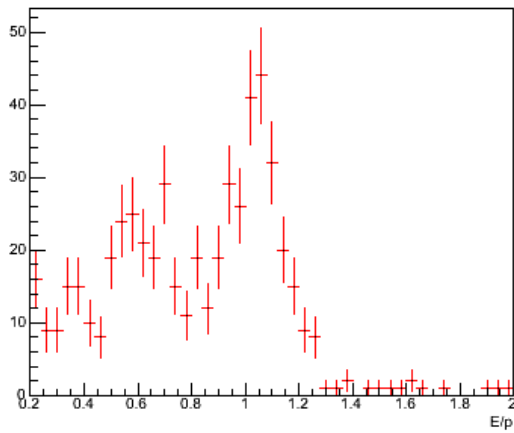
$E/p(-1.<n\sigma<3) 8<p_T<9 \text{ GeV}/c$



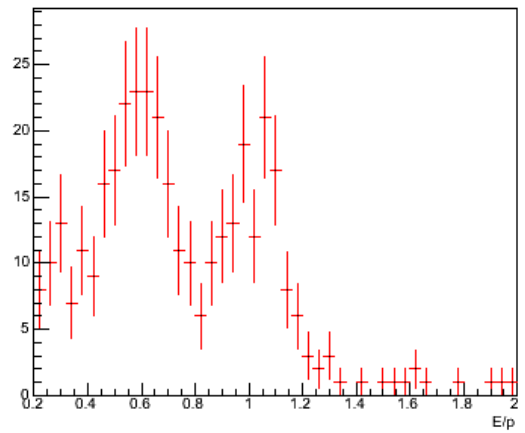
$E/p(-1.<n\sigma<3) 9<p_T<10 \text{ GeV}/c$



$E/p(-1.<n\sigma<3) 12<p_T<14 \text{ GeV}/c$

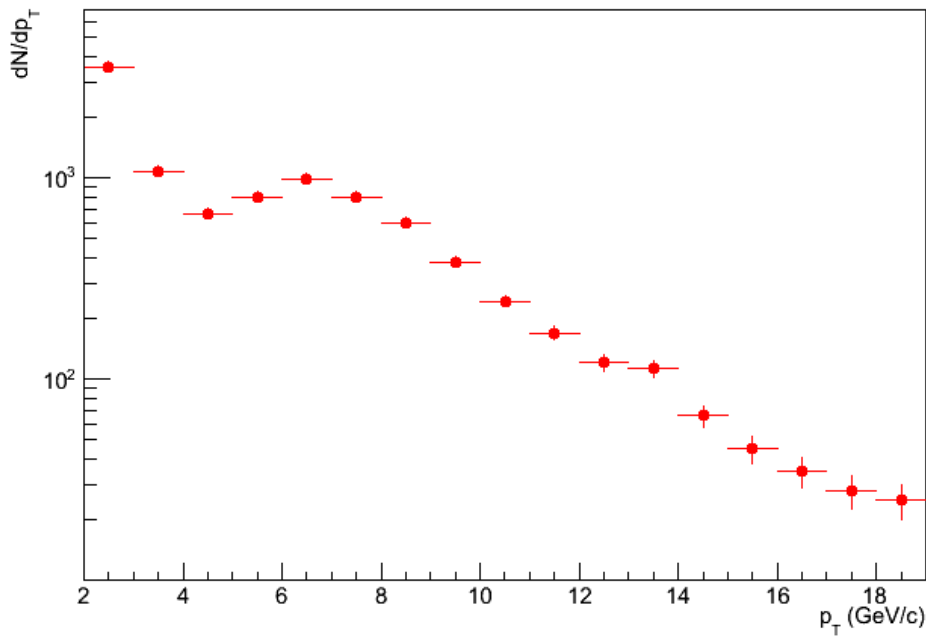


$E/p(-1.<n\sigma<3) 14<p_T<16 \text{ GeV}/c$

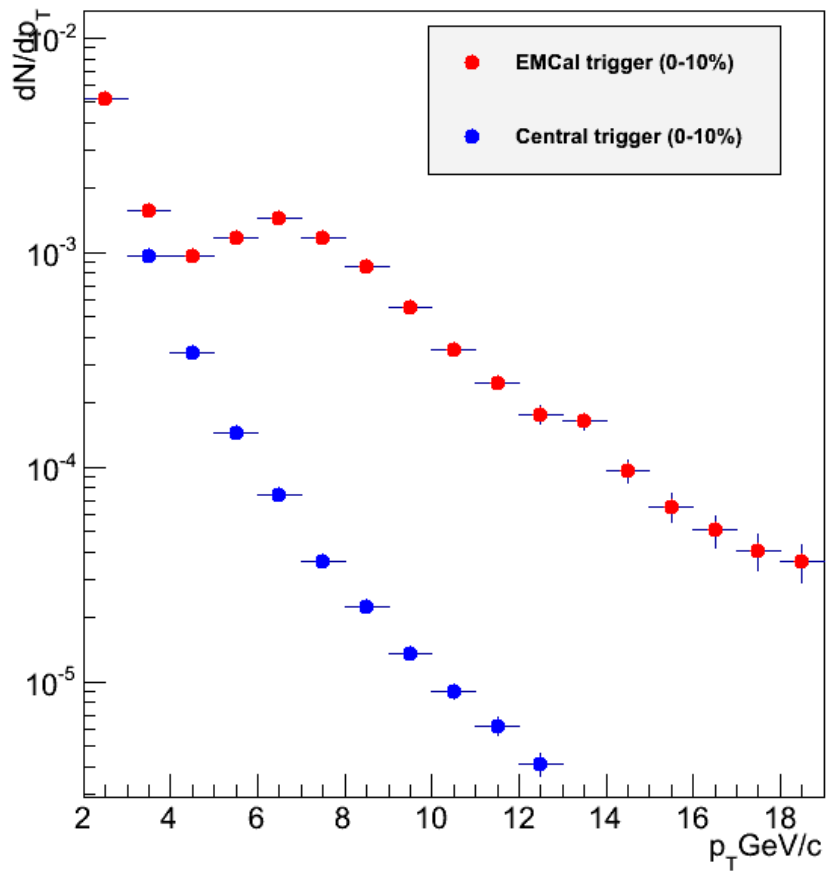


Raw electrons

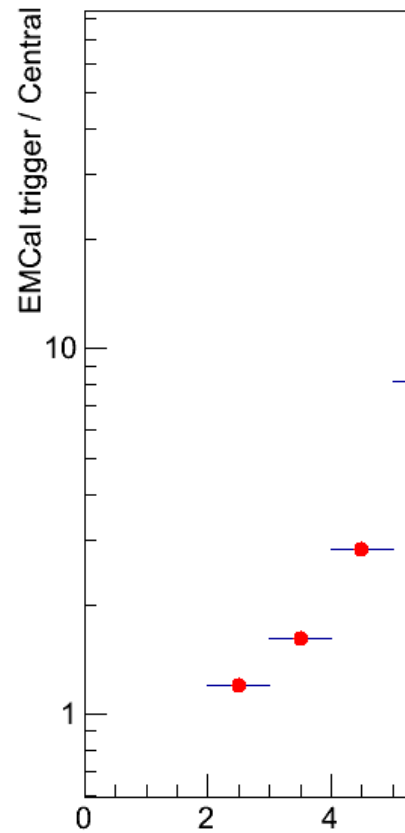
Electron 0-10% EMCal trigger



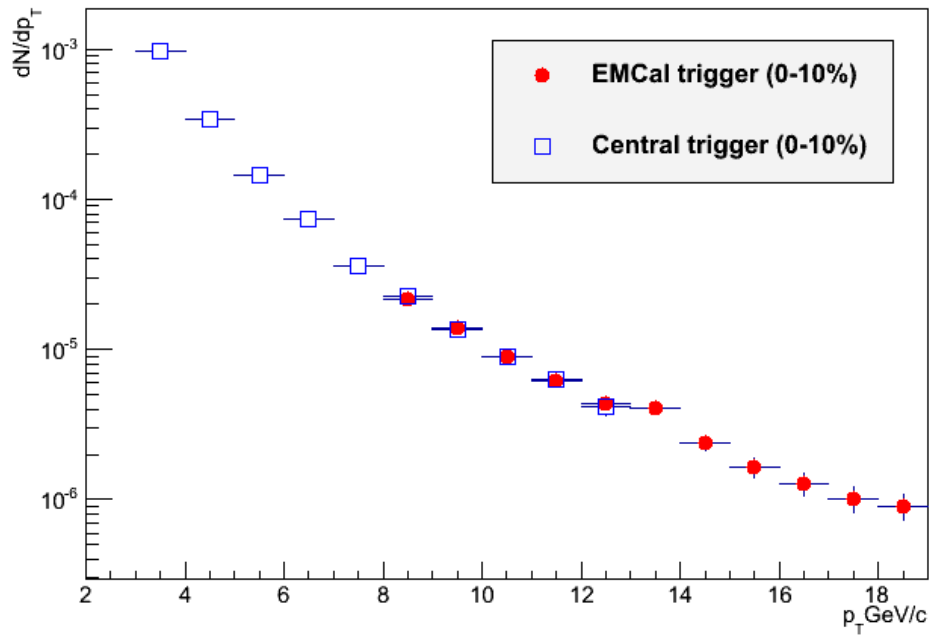
Electrons in 0-10% Centrality



EMCal trigger / Central



Electrons in 0-10% Centrality



- plots are updated on May 28th (event count wasn't correct)

Presentation

<https://indico.cern.ch/getFile.py/access?contribId=0&resId=0&materialId=slides&confId=190895>

/Users/shingo/WRK/Dayana/2012/05/10/Electrons_PbPb_20_20120508-0942
/Users/shingo/WRK/Dayana/2012/05/10/Electrons_PbPb_20_20120508-0942-cent
LEGO train20

-- ShingoSakai - 18-May-2012

This topic: Main > 05172012HighPTElectronIdentificationAndRawElectronYields
Topic revision: r5 - 2014-06-09 - ShingoSakai



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