Charged pion analysis

Run15 pAu
- Trigger Efficiencys with all dataset and Cross Section
- Disk Space request

Korea Univ.
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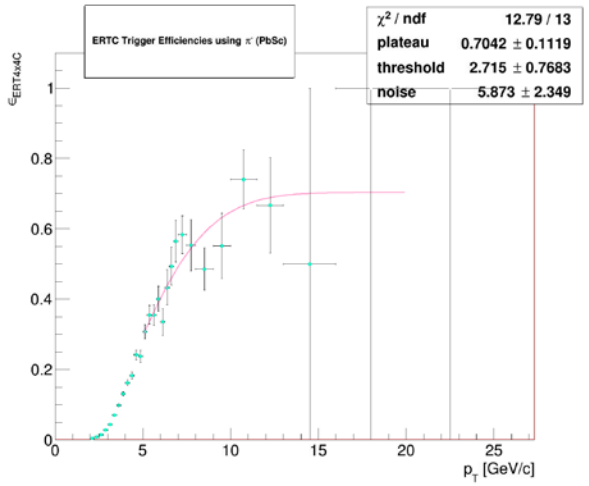
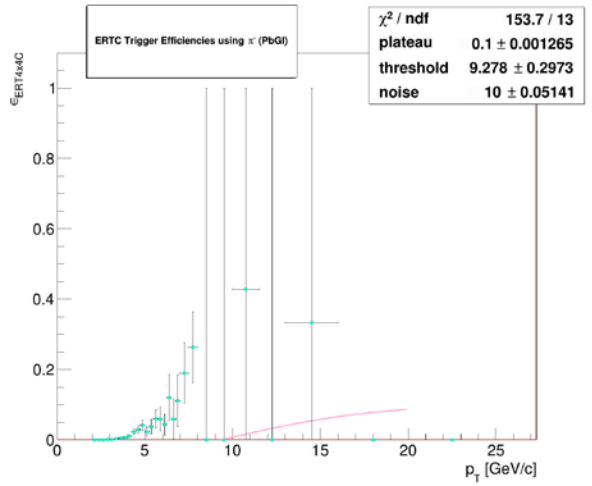
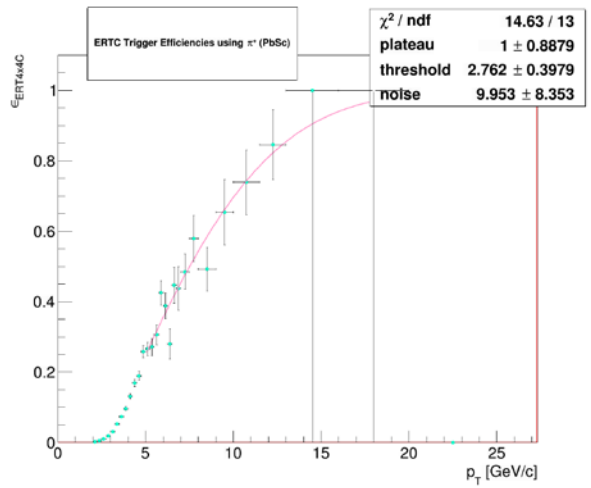
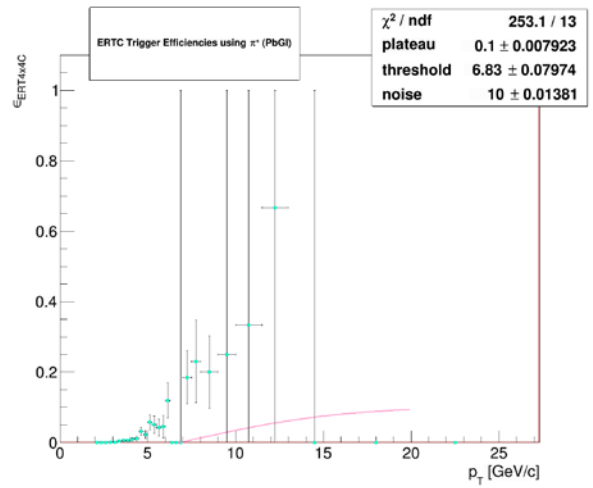
2019. 12. 19 Radiation Lab. meeting

ERT Trigger Efficiency with all dataset

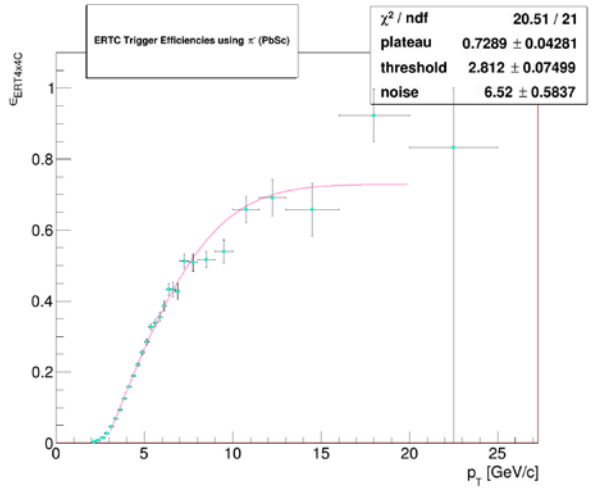


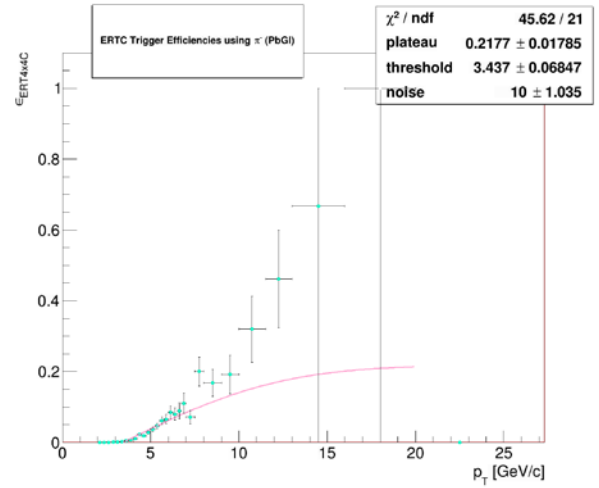


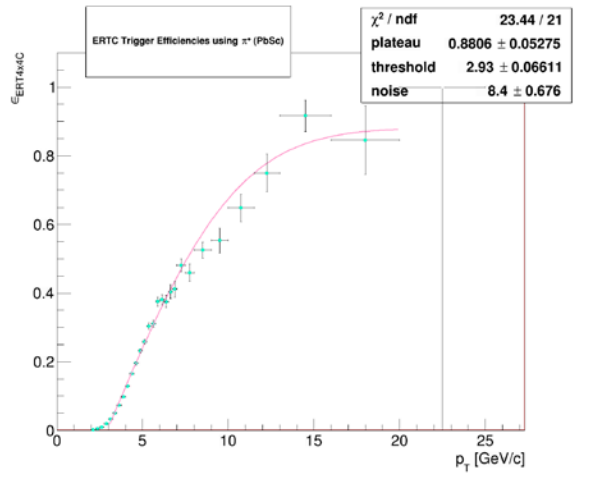


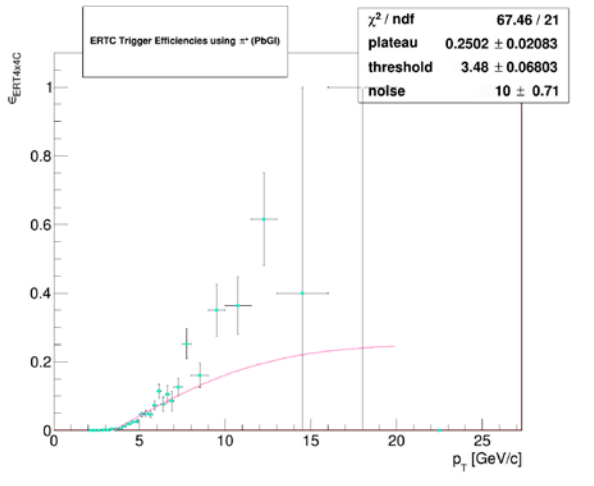


MB



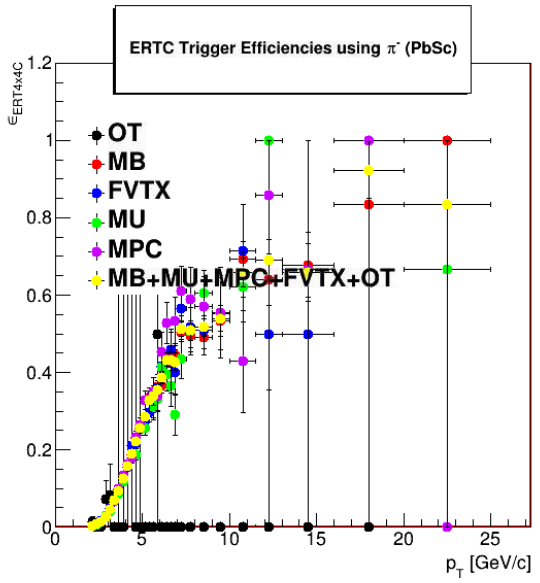


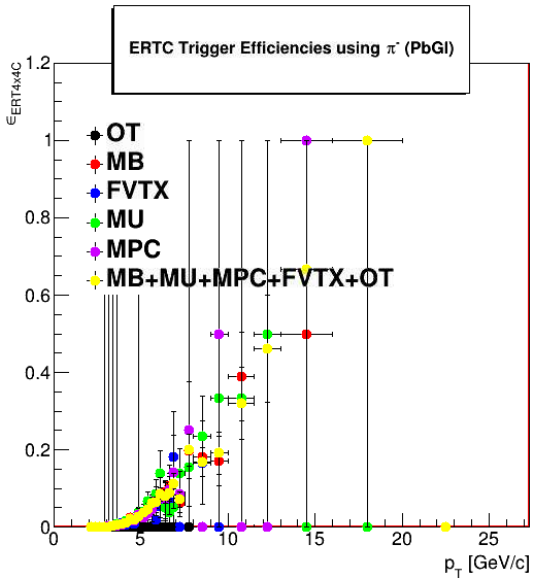


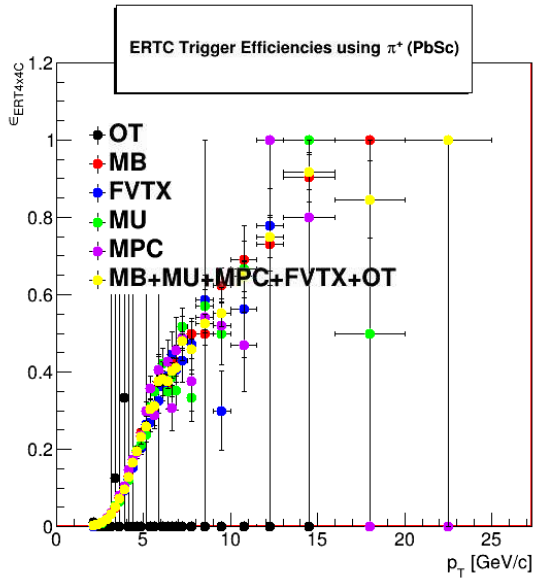


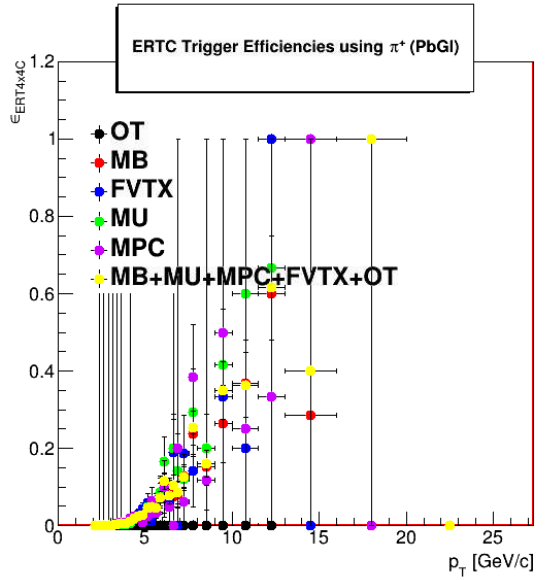
MB+MU+MPC+FVTX+OT

Comparison of ERT Trigger Efficiency









Trigger event

- /direct/phenix+u/phnxreco/run15/run15pAu_200GeV_CA_pro108/production/macros/TrigSelect.C

```
trgselname = "MU";
TrigSelect *mutrig = new TrigSelect(trgselname);
trgsel.push_back(trgselname);
mutrig->AddTrigger( "MUIDLL1_N1D&BBCLL1" );
mutrig->AddTrigger( "MUIDLL1_N1D&BBCLL1narrow" );
mutrig->AddTrigger( "MUIDLL1_N1D&BBCLL1novertex" );
mutrig->AddTrigger( "MUIDLL1_N2D&BBCLL1" );
mutrig->AddTrigger( "MUIDLL1_N2D&BBCLL1narrow" );
mutrig->AddTrigger( "MUIDLL1_N2D&BBCLL1novertex" );
mutrig->AddTrigger( "MUIDLL1_N2D&BBCLL1novtx" );
mutrig->AddTrigger( "MUIDLL1_S1D&BBCLL1" );
mutrig->AddTrigger( "MUIDLL1_S1D&BBCLL1narrow" );
mutrig->AddTrigger( "MUIDLL1_S1D&BBCLL1novertex" );
mutrig->AddTrigger( "MUIDLL1_S2D&BBCLL1" );
mutrig->AddTrigger( "MUIDLL1_S2D&BBCLL1narrow" );
mutrig->AddTrigger( "MUIDLL1_S2D&BBCLL1novertex" );
mutrig->AddTrigger( "MUON_N_SG3&BBCLL1narrow(nppg)" );
mutrig->AddTrigger( "MUON_N_SG3&BBCLL1novertex(nppg)" );
mutrig->AddTrigger( "MUON_N_SG3&BBCLL1(nppg)" );
mutrig->AddTrigger( "MUON_N_SG3&MUIDLL1_(1D||1H)&BBCLL1narrow(nppg)" );
mutrig->AddTrigger( "MUON_N_SG3&MUIDLL1_(1D||1H)&BBCLL1novertex(nppg)" );
mutrig->AddTrigger( "MUON_N_SG3&MUIDLL1_(1D||1H)&BBCLL1(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&BBCLL1narrow(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&BBCLL1novertex(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&BBCLL1(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&MUIDLL1_(1D||1H)&BBCLL1narrow(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&MUIDLL1_(1D||1H)&BBCLL1novertex(nppg)" );
mutrig->AddTrigger( "MUON_S_SG3&MUIDLL1_(1D||1H)&BBCLL1(nppg)" );

trgselname = "MPC";
TrigSelect *mpctrig = new TrigSelect(trgselname);
trgsel.push_back(trgselname);
mpctrig->AddTrigger("MPC_N_A");
mpctrig->AddTrigger("MPC_N_B");
mpctrig->AddTrigger("MPC_N_C&ERTLL1_2x2");
mpctrig->AddTrigger("MPC_S_A");
mpctrig->AddTrigger("MPC_S_C&ERTLL1_2x2");
```

No overlapping trigger.
-> No event mixing?

If there are overlapping trigger.

-> .....

```
trgselname = "MPC";
TrigSelect *mpctrig = new TrigSelect(trgselname);
trgsel.push_back(trgselname);
mpcrig->AddTrigger( "MUON_S_SG3&MUIDLL1_(1D||1H)&BBCLL1(nppg)" );
mpctrig->AddTrigger("MPC_N_A");
```

Thank you.