

Re-tune Run14 D0 cuts in Centralities

Xiaolong Chen

Targets

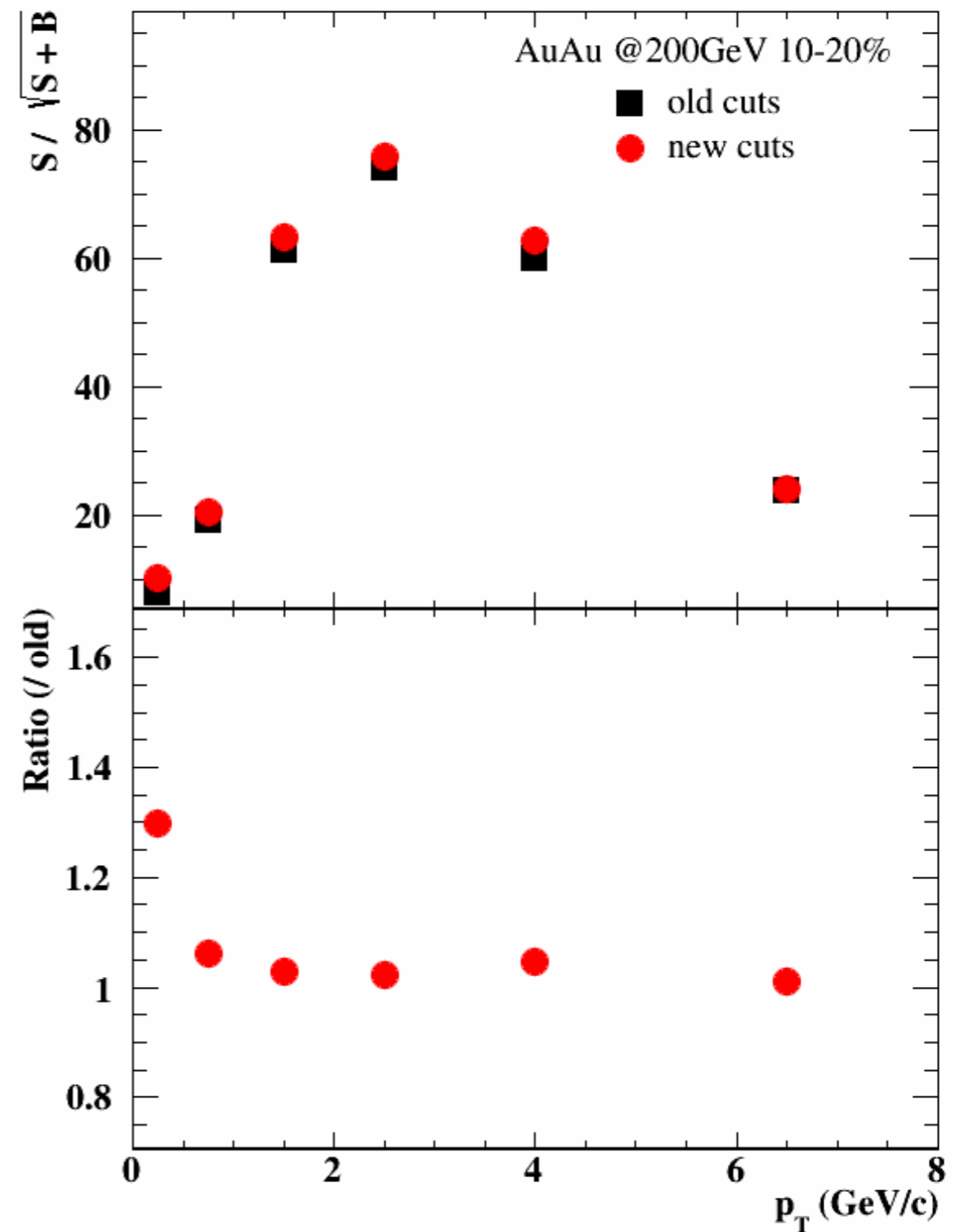
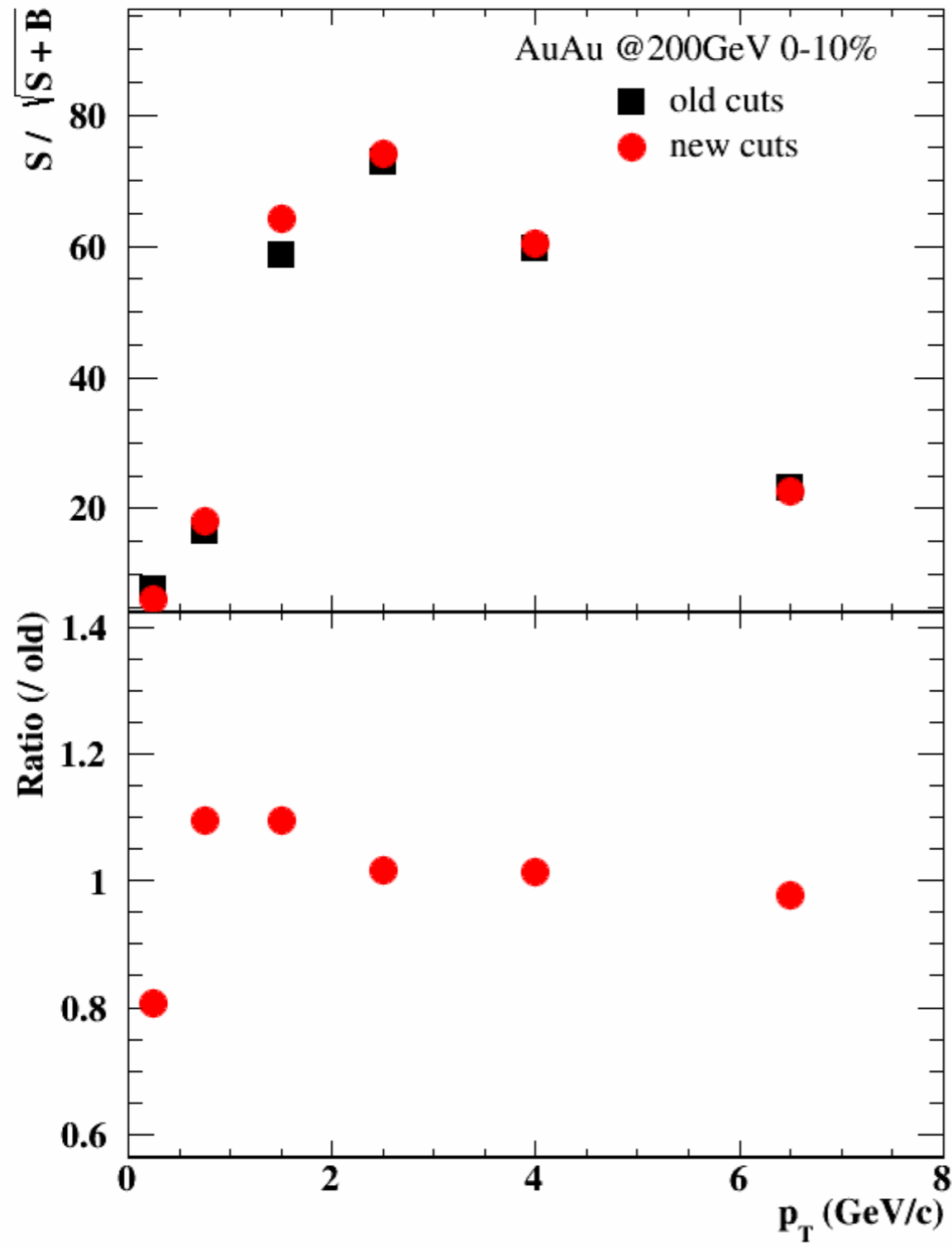
- 1. Improve D0 significance at very low pT (0-0.5)
- 2. Improve D0 significance at very peripheral events (60-80%)

Method

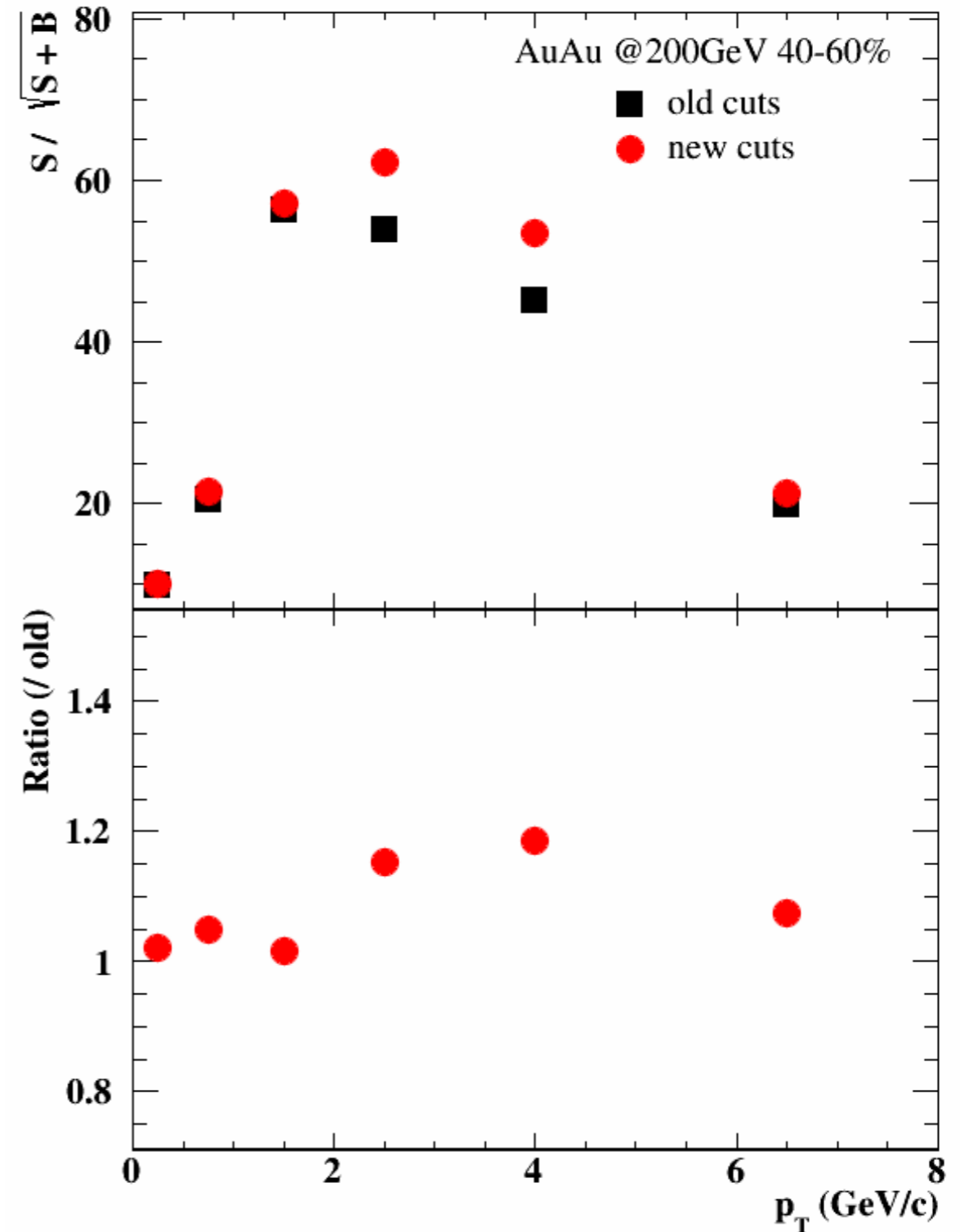
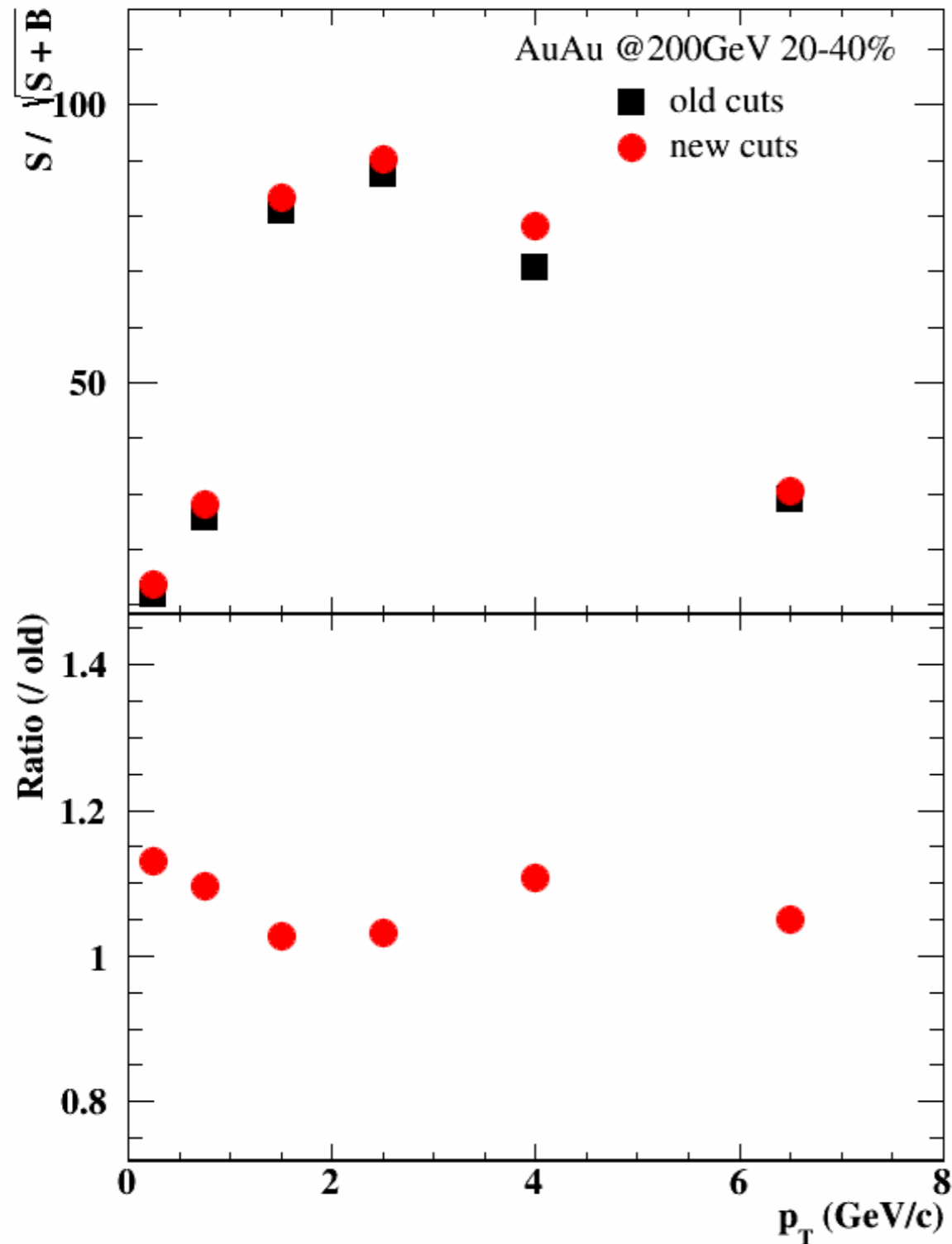
- TMVA: CutsSA (more faster than Cuts and CutsGA)

```
if (Use["CutsSA"])  
  factory->BookMethod( TMVA::Types::kCuts, "CutsSA",  
                      "H:!V:FitMethod=SA:EffSel:VarProp[0]=FMax:VarProp[1]=FMax  
:VarProp[2]=FMin:VarProp[3]=FMin:VarProp[4]=FMax:MaxCalls=150000:KernelTemp=IncAdaptive:InitialTemp=1e+6:  
MinTemp=1e-6:Eps=1e-10:UseDefaultScale" );
```

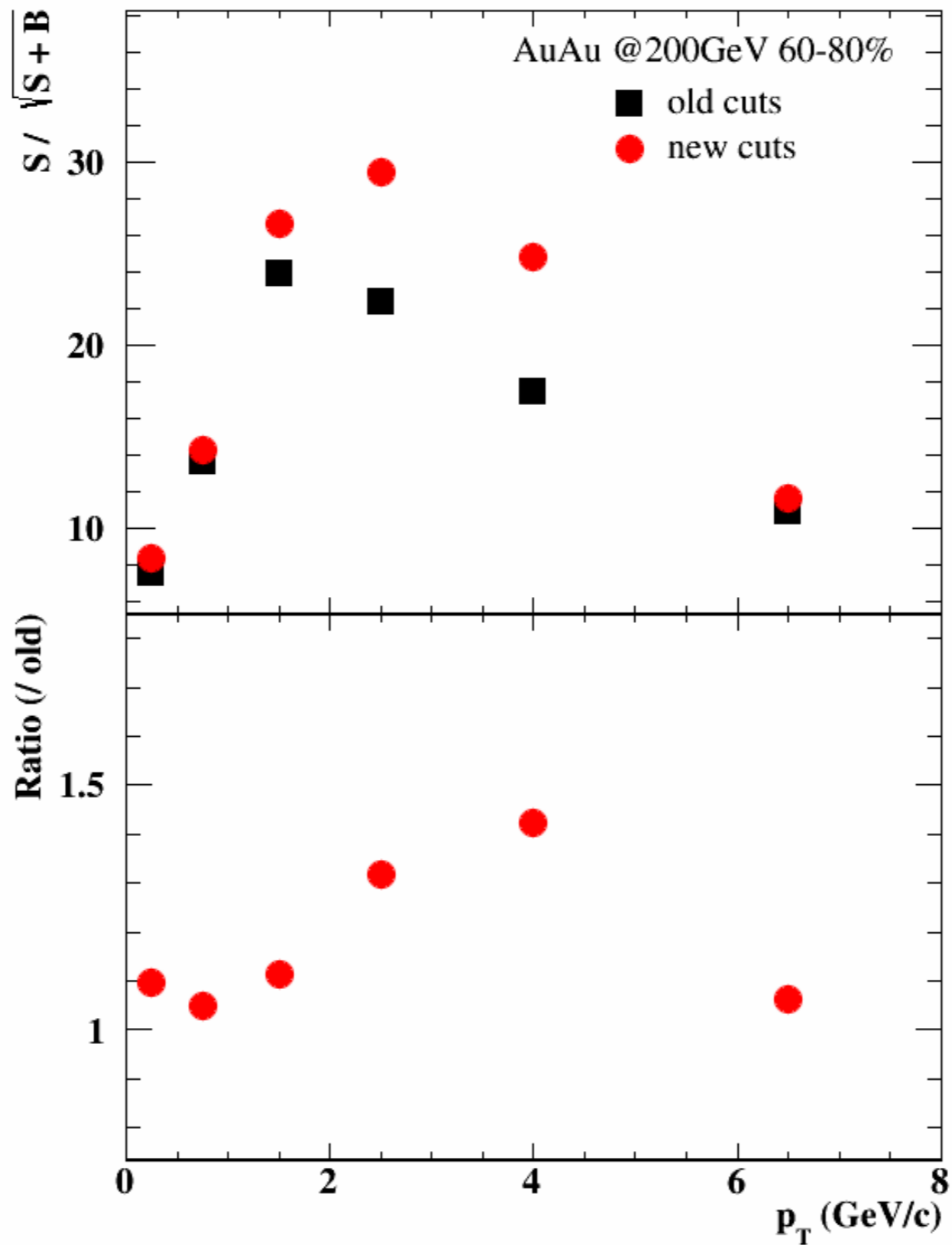
0-10% and 10-20%



20-40% and 40-60%



60-80%



0-80%

