

# Update on single electron pt and To-do list for dielectron cocktail

LMee PAG Meeting

İrem Özdemir  
March 31<sup>th</sup>, 2015

# Single electron pt's from pizero, eta and omega (crosscheck for Shinichi) I

## Settings

```
gener->SetCollisionSystem(AliGenEMlib::kpPb);  
gener->SetPtParamPi0(AliGenEMlib::kPichargedParam);  
gener->SetV2Systematic(AliGenEMlib::kNoV2Sys);  
gener->SetNPart(50000);  
gener->SetPtRange(0.,20.);  
gener->SetYRange(-1.,1.);  
gener->SetPhiRange(0., 360.);  
gener->SetOrigin(0.,0.,0.);  
gener->SetSigma(0.,0.,0.);  
gener->SetTrackingFlag(0);  
gener->SetDecayMode(kElectronEM);  
gener->SetWeightingMode(kNonAnalog);
```

## Cocktail inputs

pi0 pt spectra:

Modified Hagedorn exponential fit to charged pions for MB pPb as approximation of pi0  
(kPichargedParam)

Meson-to-Pion ratios:

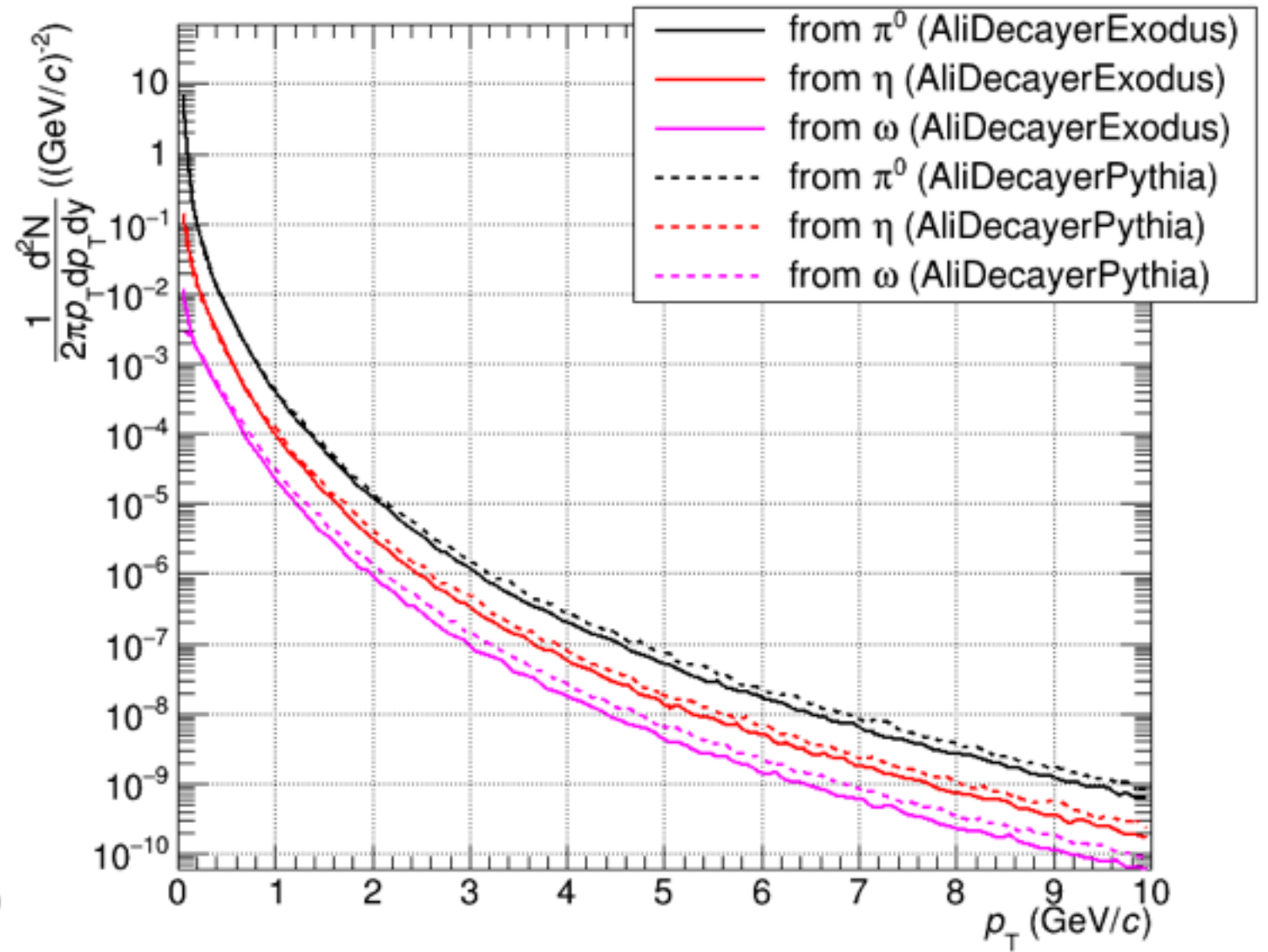
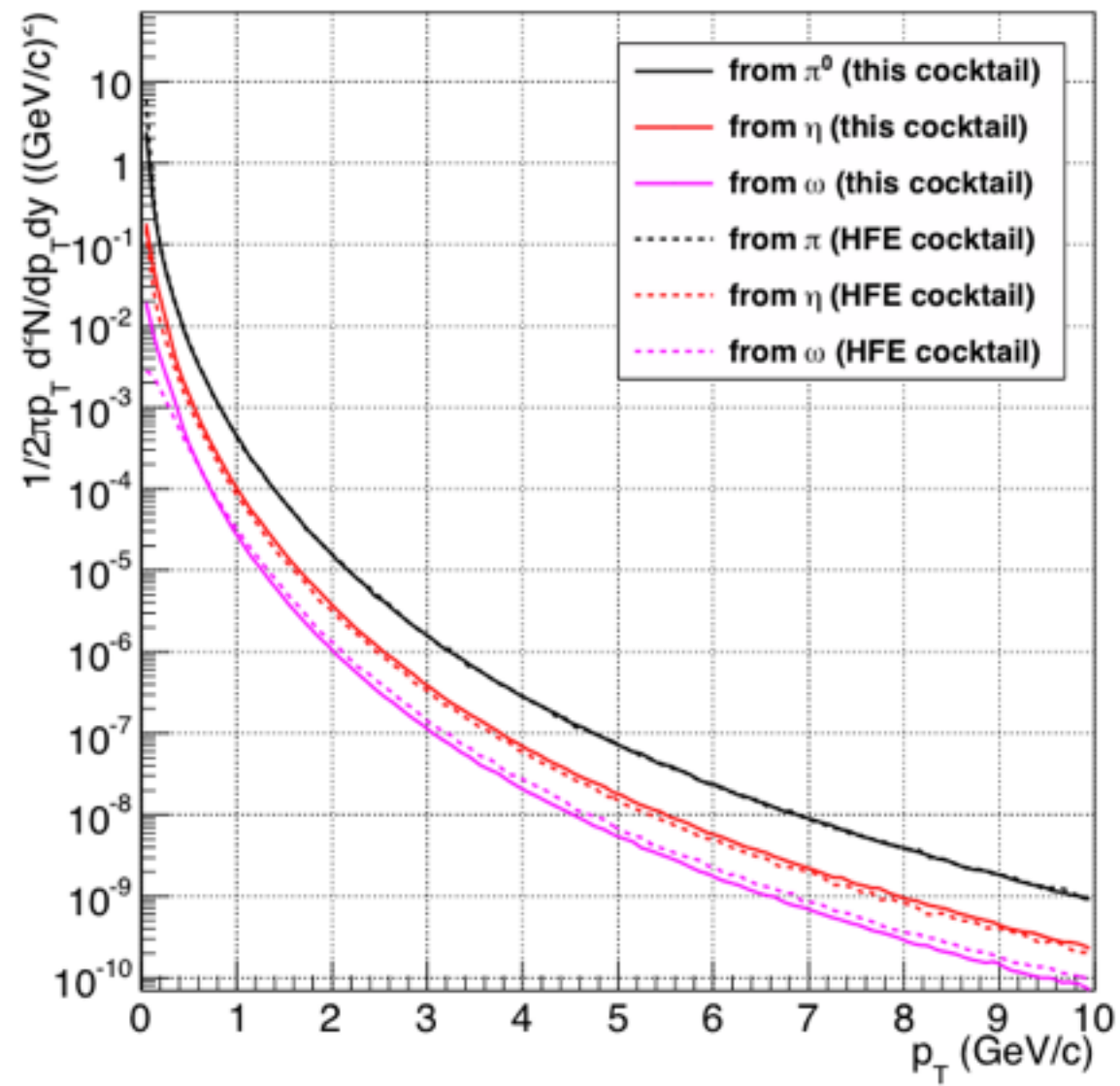
eta/pi0 = 0.476

omega/pi0 = 0.85

# Single electron pt's from pizero, eta and omega (crosscheck for Shinichi) II

From pPb MB analysis note:

My pPb MB cocktail:



## To-do for dielectron cocktail

- ccBar and bbBar contributions with less systematic uncertainties - in particular for ccBar - (*in cooperation with Raphaelle Bailhache*)
- Blast-Wave parametrization for LMR in PbPb collisions (*Carsten Klein*)
- J/Psi generation using PHOTOS+EvtGen
  - parameterizations for several collision systems need to be collected
- Contribution of the Drell-Yan process

Schedule according to the paper plan for pp:

7 weeks may be possible except the Drell-Yan process