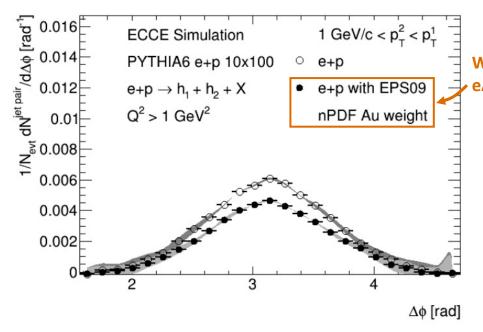
Two-Particle Correlations



Weighted eA results

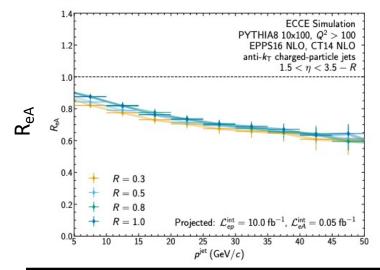
- Updated results with the July concept
- Systematics uncertainty included
- nPDF weighting for eA study

- Dijet correlations after subtracting flat background.
- Systematic uncertainty (grey band) is the difference between generator-level and reco-level correlations
- Conclusion: e+Au away-side suppression is larger than systematic difference between reco and generator

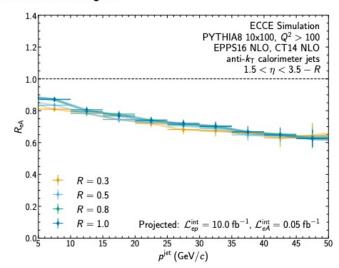


Jet R_{eA}





Calorimeter jets



- Systematic uncertainty includes the nPDF weighting
- Include luminosity projection: $L_{ep}^{int} = 10.0 fb^{-1}$

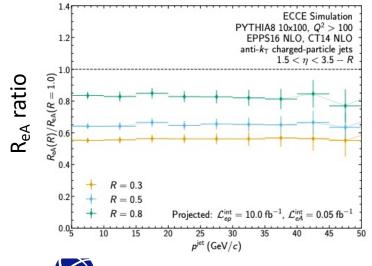
 $L_{ep}^{int} = 10.0 \, fb^{-1}$ $L_{eA}^{int} = 0.05 \, fb^{-1}$

Conclusion:

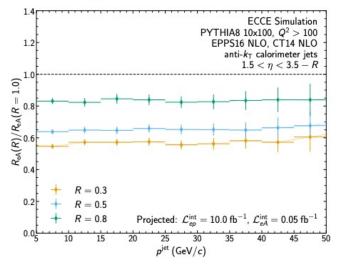
(1) ECCE can measure jet modification due to nuclear matter interactions in the forward region. (2) the

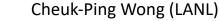
forward region. (2) the projection of ReA double ratio suggest that we can disentangle intial and final state modification

Charged jets



Calorimeter jets





Analysis Notes Status (11-05-2021)

Ecce_note_phys_2021_01 -- ECCE jet reconstruction performance Released v0.1

Milap Petal (ISU) mrpind@iastate.edu

Ecce_note_phys_2021_10 -- Jets finding using Centauro Algorithm Released v0.7

Anne Sickle (UIUC) sickles@illinois.edu

Ecce_note_phys_2021_08 -- Jet ReA

Released v0.1

Megan Connors (GSU) mconnors@gsu.edu Christine Nattrass (UTK) interested christine.nattrass@utk.edu

Ecce_note_phys_2021_13 -- Two-particle correlations

Released v0.1 (expecting v0.2 release with systematic study)

Astrid Morreale (LANL) astrid@lanl.gov Cesar da Silva (LANL) cesar_luiz@lanl.gov

Ecce_note_phys_2021_04 -- Open HF ReA

Released v0.1

Marzia (ISU) mrosati@iastate.edu

Ecce_note_phys_2021_15 -- J/psi photoproduction

Expecting 1st release in the week of 11-08-2021

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