



ECCE HF & Jets Working Group Meeting

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Agenda

- Ping: update
- Rosi & Tristan: Lehigh's plan on ECCE jet study
- Cameron: HF reconstruction using KFParticle in Fun4All



Update: Task Signup Sheet

- We have five groups signed up for the task signup sheets
- Feel free to sign up if you haven't done it yet

Instititues	Contact person	email	EIC Physics interest	Goal / key plot	reference (e.g. yellow report, paper)
LANL	Xuan Li	xuanli@lanl.gov	heavy flavor and jet production in e+p and e+A collisions	HF ReA projection with the ECCE detector performance	1, EIC YR (e.g. FIG 7.93, FIG 7.94). 2, EPJ Web of Conferences 235, 04002 (2020). 3, arXiv: 2009. 02888.
Lehigh	Tristan Protzman	tlp220@lehigh.edu	Jet energy scale and resolution	YR 8.43	Yellow Report
USTC	XinBai Li	ustclxb@163.com	charmonium reconstruction	ReA	fig. 7.92 in YR
IMP	Yi Yin	phyyin@gmail.com	QCD evolution in QGP and in nucleon	TBD	1808.0325
ORNL	Raymond Ehlers	raymond.ehlers@cern.ch	Fundamental QCD via jets and HF (angularities, substructure, ReA, etc)	YR 7.89, for example	EIC YR

https://docs.google.com/spreadsheets/d/1H41osREt_7TQQDZ4yxH4ngTFkiSZECvvNaBW6OLEWZs/edit#gid=0



Update: Detector Proposal

- The physics section in the detector proposal will be organized by EIC physics topics rather than physics working group
<https://indico.bnl.gov/event/11937/>
- Each WG will provide 2-3 key plots. However, other contributions will be referenced in the detector proposal.
→ We would like to ask each group to have an analysis notes for your work on arXiv at the end
- The steering committees proposed god parent system for each physics study

Processes Topics	Inclusive	Semi-Inclusive	Jets, Heavy Quarks	Exclusive	Diffractive, Forward Tagging
Global properties & parton structure	incl. SF	h, hh	jet, Q	excl. $Q\bar{Q}$	incl. diffraction, tagged DIS on D/He
Multidimensional Imaging		h	jet, di-jet, jet+h, Q, $Q\bar{Q}$	DVCS, DVMP, elast. scattering	
Nucleus	incl. SF	h, hh	jet, di-jet, Q, $Q\bar{Q}$	coh. VM, di-jet, h, hh, D/He FF	diff. SF, incoh. VM, di-jet, h, hh, nucl. fragments
Hadronization		h, hh, jet+h	jet, Q, $Q\bar{Q}$		
Other fields	incl. SF with e^+ , $\sigma_{\gamma A}^{\text{tot}}$	charged curr. DIS, $\sigma_{\gamma A \rightarrow hX}$		$\sigma_{\gamma A}^{\text{elast}}$	$\sigma_{\gamma A}^{\text{diff}}$

