

# **1st EIC Yellow Report Workshop at Temple University**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

# Welcome

*Thursday, 19 March 2020 08:30 (10 minutes)*

**Presenters:** METZ, Andreas (Temple University); SURROW, Bernd (Temple University)

**Session Classification:** EIC Project Status - Part 1

Contribution ID: 2

Type: **not specified**

## Statement by ALD's BNL and JLab

*Thursday, 19 March 2020 08:40 (10 minutes)*

**Presenters:** MUELLER, Berndt (BNL); MCKEOWN, Bob (JLab)

**Session Classification:** EIC Project Status - Part 1

Contribution ID: 3

Type: **not specified**

## EIC project overview

*Thursday, 19 March 2020 08:50 (30 minutes)*

**Presenter:** YECK, James (University of Wisconsin-Madison and Brookhaven National Laboratory)

**Session Classification:** EIC Project Status - Part 1

Contribution ID: 4

Type: **not specified**

## Machine design status and plans

*Thursday, 19 March 2020 09:45 (30 minutes)*

**Presenter:** WILLEKE, Ferdinand (BNL)

**Session Classification:** EIC Project Status - Part 1

Contribution ID: 5

Type: **not specified**

## IR design status and plans

**Presenter:** WITTE, Holger (BNL)

**Session Classification:** EIC Project Status - Part 1

Contribution ID: 6

Type: **not specified**

## IR design status and plans

*Thursday, 19 March 2020 11:00 (30 minutes)*

**Presenter:** WITTE, Holger (BNL)

**Session Classification:** EIC Project Status - Part 2

Contribution ID: 7

Type: **not specified**

## YR goals and plans

*Thursday, 19 March 2020 11:45 (15 minutes)*

**Presenters:** ENT, Rolf (Jefferson Lab); ULLRICH, Thomas (BNL)

**Session Classification:** EIC Project Status - Part 2



Contribution ID: 8

Type: **not specified**

## Software WG Overview

*Thursday, 19 March 2020 12:15 (30 minutes)*

**Presenter:** DIEFENTHALER, Markus (Jefferson Lab)

**Session Classification:** EIC Project Status - Part 2

Contribution ID: 9

Type: **not specified**

## **EIC project overview - Discussion / Questions**

*Thursday, 19 March 2020 09:20 (25 minutes)*

**Session Classification:** EIC Project Status - Part 1

Contribution ID: **10**

Type: **not specified**

## **Machine design status and plans - Discussion / Questions**

*Thursday, 19 March 2020 10:15 (25 minutes)*

**Session Classification:** EIC Project Status - Part 1

Contribution ID: **11**

Type: **not specified**

## **IR design status and plans - Discussion / Questions**

*Thursday, 19 March 2020 11:30 (15 minutes)*

**Session Classification:** EIC Project Status - Part 2

Contribution ID: 12

Type: **not specified**

## YR goals and plans - Discussion / Questions

*Thursday, 19 March 2020 12:00 (15 minutes)*

**Session Classification:** EIC Project Status - Part 2

Contribution ID: **13**

Type: **not specified**

## **Software WG Overview - Discussion / Questions**

*Thursday, 19 March 2020 12:45 (15 minutes)*

**Session Classification:** EIC Project Status - Part 2

Contribution ID: 14

Type: **not specified**

## Inclusive reactions WG

*Thursday, 19 March 2020 14:00 (10 minutes)*

**Presenters:** SCHMOOKLER, Barak (Stony Brook University); FATEMI, Renee (University of Kentucky); SATO, nobuo (Jefferson Lab)

**Session Classification:** Physics WG

Contribution ID: 15

Type: **not specified**

## Semi-inclusive Reactions WG

*Thursday, 19 March 2020 14:20 (10 minutes)*

**Presenters:** VOSSEN, Anselm (Duke University); XIAO, Bowen (Central China Normal University); STEVENS, Justin (William & Mary); SEIDL, Ralf (RIKEN); ALEXEY, Vladimirov (Regensburg University)

**Session Classification:** Physics WG



Contribution ID: **16**

Type: **not specified**

## Jets, Heavy Quarks WG

*Thursday, 19 March 2020 14:40 (10 minutes)*

**Presenters:** PAGE, Brian (Brookhaven National Laboratory); SICHTERMANN, Ernst (Lawrence Berkeley National Laboratory); PETRIELLO, Frank (Northwestern University); VITEV, Ivan (LANL); CUN-QUEIRO, Leticia (ORNL)

**Session Classification:** Physics WG

Contribution ID: **18**

Type: **not specified**

## Exclusive Reactions WG

*Thursday, 19 March 2020 15:00 (10 minutes)*

**Presenters:** PASQUINI, Barbara (University of Pavia and INFN, Pavia); SOKHAN, Daria; DUPRE, Raphael (IPN Orsay); FAZIO, Salvatore (Brookhaven National Laboratory); LAPPI, Tuomas (University of Jyvaskyla)

**Session Classification:** Physics WG

Contribution ID: 19

Type: **not specified**

## Diffraction Reactions & Tagging WG

*Thursday, 19 March 2020 15:20 (10 minutes)*

**Presenters:** STASTO, Anna (Penn State University); HIGINBOTHAM, Douglas (Jefferson Lab); HEN, Or (MIT); KLEIN, Spencer (LBNL); COSYN, Wim (FIU)

**Session Classification:** Physics WG

Contribution ID: **20**

Type: **not specified**

## Discussion

*Thursday, 19 March 2020 15:40 (20 minutes)*

**Session Classification:** Physics WG

Contribution ID: 21

Type: **not specified**

## Inclusive reactions WG summary

*Saturday, 21 March 2020 08:30 (10 minutes)*

**Presenters:** SCHMOOKLER, Barak (Stony Brook University); FATEMI, Renee (University of Kentucky); SATO, nobuo (Jefferson Lab)

**Session Classification:** Working Group Summaries

Contribution ID: 22

Type: **not specified**

## Semi-inclusive Reactions WG summary

*Saturday, 21 March 2020 08:45 (10 minutes)*

**Presenters:** VOSSEN, Anselm (Duke University); XIAO, Bowen (Central China Normal University); STEVENS, Justin (William & Mary); SEIDL, Ralf (RIKEN); ALEXEY, Vladimirov (Regensburg University)

**Session Classification:** Working Group Summaries

Contribution ID: 23

Type: **not specified**

## Jets, Heavy Quarks WG summary

*Saturday, 21 March 2020 09:00 (10 minutes)*

**Presenters:** PAGE, Brian (Brookhaven National Laboratory); SICHTERMANN, Ernst (Lawrence Berkeley National Laboratory); PETRIELLO, Frank (Northwestern University); VITEV, Ivan (LANL); CUN-QUEIRO, Leticia (ORNL)

**Session Classification:** Working Group Summaries

Contribution ID: 24

Type: **not specified**

## Exclusive Reactions WG summary

*Saturday, 21 March 2020 09:15 (10 minutes)*

**Presenters:** PASQUINI, Barbara (University of Pavia and INFN, Pavia); SOKHAN, Daria; DUPRE, Raphael (IPN Orsay); FAZIO, Salvatore (Brookhaven National Laboratory); LAPPI, Tuomas (University of Jyvaskyla)

**Session Classification:** Working Group Summaries



Contribution ID: 25

Type: **not specified**

## Diffraction Reactions & Tagging WG summary

*Saturday, 21 March 2020 09:30 (10 minutes)*

**Presenters:** STASTO, Anna (Penn State University); HIGINBOTHAM, Douglas (Jefferson Lab); HEN, Or (MIT); KLEIN, Spencer (LBNL); COSYN, Wim (FIU)

**Session Classification:** Working Group Summaries

Contribution ID: 26

Type: **not specified**

## Tracking WG summary

*Saturday, 21 March 2020 09:45 (10 minutes)*

**Presenters:** MASTROSERIO, Annalisa (Università degli Studi di Foggia and INFN); GNANVO, Kondo (University of Virginia); GREINER, Leo (LBNL)

**Session Classification:** Working Group Summaries

Contribution ID: 27

Type: **not specified**

## Software - Questions / Discussion

*Saturday, 21 March 2020 11:30 (1 hour)*

**Session Classification:** Software Discussion / International engagement Discussion

Contribution ID: 28

Type: **not specified**

## International engagement - Discussion

*Saturday, 21 March 2020 12:30 (1 hour)*

**Session Classification:** Software Discussion / International engagement Discussion

Contribution ID: 29

Type: **not specified**

## Summary of available DVCS and GPDs impact studies in e+p at EIC

*Thursday, 19 March 2020 16:30 (20 minutes)*

**Presenter:** FAZIO, Salvatore (Brookhaven National Laboratory)

**Session Classification:** Physics WG Exclusive

Contribution ID: **30**

Type: **not specified**

## DVCS and $\pi^0$ study

*Thursday, 19 March 2020 16:50 (20 minutes)*

**Presenter:** GIROD, Francois-Xavier (JLab)

**Session Classification:** Physics WG Exclusive

Contribution ID: **31**

Type: **not specified**

## **TCS with PARTONS**

*Friday, 20 March 2020 09:30 (20 minutes)*

**Presenter:** WAGNER, Jakub (National Centre for Nuclear Research)

**Session Classification:** Physics WG Exclusive

Contribution ID: **32**

Type: **not specified**

## **Common discussion: "what we have & what's next?"**

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Session Classification:** Physics WG Exclusive



Contribution ID: 33

Type: **not specified**

## Summary of available studies on VMP in e+p collisions at EIC

*Friday, 20 March 2020 08:30 (20 minutes)*

**Presenter:** JOOSTEN, Sylvester (Argonne National Laboratory)

**Session Classification:** Physics WG Exclusive

Contribution ID: 34

Type: **not specified**

## **Summary of studies and challenges for VMP in e+A collisions at EIC**

*Friday, 20 March 2020 08:50 (20 minutes)*

**Presenter:** ULLRICH, Thomas (BNL)

**Session Classification:** Physics WG Exclusive

Contribution ID: 35

Type: **not specified**

## **Exclusive di-jet production as an access gluon Wigner fcn.**

*Friday, 20 March 2020 09:10 (20 minutes)*

**Presenter:** MANTYSAARI, Heikki

**Session Classification:** Physics WG Exclusive

Contribution ID: 36

Type: **not specified**

## **Common discussion: "what we have & what's next?"**

*Friday, 20 March 2020 09:50 (40 minutes)*

**Session Classification:** Physics WG Exclusive

Contribution ID: 37

Type: **not specified**

## Accessing the transverse force in a nucleon

*Friday, 20 March 2020 11:00 (20 minutes)*

**Presenter:** BURKARDT, Matthias (New Mexico State U.)

**Session Classification:** Physics WG Exclusive

Contribution ID: **38**

Type: **not specified**

## Common discussion chaired by Christian Weiss

*Friday, 20 March 2020 11:40 (1h 20m)*

What is the needed kinematic reach (in  $x$  and  $Q^2$ )?  
What is the lowest c.o.m. energy we need to reach?

**Presenter:** WEISS, Christian (Jefferson Lab)

**Session Classification:** Physics WG Exclusive

Contribution ID: 39

Type: **not specified**

## Separating Coherent and Incoherent Interactions

*Friday, 20 March 2020 14:00 (5 minutes)*

**Presenter:** KLEIN, Spencer (LBNL)

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: 40

Type: **not specified**

## Coherent DVCS with light nuclei

*Friday, 20 March 2020 14:10 (5 minutes)*

**Presenters:** STASTO, Anna (Penn State University); PASQUINI, Barbara (University of Pavia and INFN, Pavia); SOKHAN, Daria; HIGINBOTHAM, Douglas (Jefferson Lab); HEN, Or (MIT); DUPRE, Raphael (IPN Orsay); FAZIO, Salvatore (Brookhaven National Laboratory); KLEIN, Spencer (LBNL); LAPPI, Tuomas (University of Jyvaskyla)

**Session Classification:** Exclusive/Diffractive - Tagging/DWG



Contribution ID: 41

Type: **not specified**

## **Effect of beam smearing on tagging/Accessible t-range**

*Friday, 20 March 2020 14:20 (5 minutes)*

**Presenter:** WEISS, Christian (Jefferson Lab)

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: 42

Type: **not specified**

## Requirements on tracking from VMP in e+A

*Friday, 20 March 2020 14:30 (5 minutes)*

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: 43

Type: **not specified**

## Current simulation results with IR + detectors

*Friday, 20 March 2020 14:50 (30 minutes)*

**Presenter:** JENTSCH, Alexander (Brookhaven National Lab)

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: 44

Type: **not specified**

## Discussion

*Friday, 20 March 2020 15:20 (10 minutes)*

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: 45

Type: **not specified**

## PWG/DWG common questions

*Friday, 20 March 2020 16:00 (1 hour)*

- 1.- Common set of energies, beam species, luminosities, and polarization
- 2.- What physics processes drive each detector component the most, and what are these requirements?
- 3.- Considerations/constraints from the detector design side that must be included into baseline physics simulations
- 4.- How do we organize the various steps of the work that require interactions and feedback between PWG and DWG ?

**Session Classification:** Joint PWG/DWG Session - Detector Complementarity Discussion

Contribution ID: 46

Type: **not specified**

## Detector complementarity discussion

*Friday, 20 March 2020 17:00 (1h 30m)*

**Presenter:** ASCHENAUER, E. C. (BNL)

**Session Classification:** Joint PWG/DWG Session - Detector Complementarity Discussion

Contribution ID: 47

Type: **not specified**

## N -> N\* transition GPDs

*Friday, 20 March 2020 11:20 (20 minutes)*

**Presenter:** TANDOĞAN, Asli (Bochum U.)

**Session Classification:** Physics WG Exclusive

Contribution ID: 48

Type: **not specified**

## Silicon Sensors for Forward Tracking

*Thursday, 19 March 2020 14:00 (30 minutes)*

**Presenter:** LI, Xuan (Los Alamos National Lab)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity



Contribution ID: 49

Type: **not specified**

## Sensors for Roman Pots - eRD24

*Thursday, 19 March 2020 14:30 (30 minutes)*

**Presenter:** TRICOLI, Alessandro (Brookhaven National Lab)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: 50

Type: **not specified**

## Zero Degree Calorimetry

*Thursday, 19 March 2020 15:00 (30 minutes)*

**Presenter:** GOTO, Yuji (RIKEN)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: 51

Type: **not specified**

## Open Discussion

*Thursday, 19 March 2020 15:30 (30 minutes)*

**Presenter:** JENTSCH, Alexander (Brookhaven National Lab)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: 52

Type: **not specified**

## Introduction

*Friday, 20 March 2020 08:30 (30 minutes)*

**Presenters:** CELENTANO, Andrea (INFN-Genova); NEYRET, Damien (CEA Saclay IRFU/DPhN)

**Session Classification:** Detector WG Electronics/DAQ

Contribution ID: 53

Type: **not specified**

## Overview of eR&D23 activities

*Friday, 20 March 2020 09:00 (30 minutes)*

**Presenter:** BATTAGLIERI, Marco (Jefferson Lab)

**Session Classification:** Detector WG Electronics/DAQ

Contribution ID: 54

Type: **not specified**

## Discussion

*Friday, 20 March 2020 09:30 (15 minutes)*

**Session Classification:** Detector WG Electronics/DAQ

Contribution ID: 55

Type: **not specified**

## **EIC data rates and noise estimates for a streaming readout system**

*Friday, 20 March 2020 09:45 (30 minutes)*

**Presenter:** Dr HUANG, Jin (Brookhaven National Lab)

**Session Classification:** Detector WG Electronics/DAQ

Contribution ID: 56

Type: **not specified**

## Discussion

*Friday, 20 March 2020 10:15 (15 minutes)*

**Session Classification:** Detector WG Electronics/DAQ



Contribution ID: 57

Type: **not specified**

## **Meson structure functions - (forward) detector requirements**

*Friday, 20 March 2020 14:40 (5 minutes)*

**Presenter:** HORN, Tanja (Cath)

**Session Classification:** Exclusive/Diffractive - Tagging/DWG

Contribution ID: **58**

Type: **not specified**

## Introduction

*Thursday, 19 March 2020 14:00 (10 minutes)*

**Presenters:** HEMMICK, Thomas (Stony Brook University); ROSSI, Patrizia (Jefferson Lab)

**Session Classification:** Detector WG PID

Contribution ID: 59

Type: **not specified**

## High-Resolution ps TOF for PID at the EIC

*Thursday, 19 March 2020 14:10 (20 minutes)*

**Presenter:** Dr CHIU, Mickey (Brookhaven National Lab)

**Session Classification:** Detector WG PID

Contribution ID: **60**

Type: **not specified**

## **Evaluation of small photo-sensors in high magnetic fields for EIC PID**

*Thursday, 19 March 2020 15:05 (15 minutes)*

**Presenter:** ILIEVA, Yordanka (University of South Carolina)

**Session Classification:** Detector WG PID

Contribution ID: **61**

Type: **not specified**

## **Development of MCP-PMT/LAPPD and exploring their application for particle identification**

*Thursday, 19 March 2020 14:30 (15 minutes)*

**Presenter:** XIE, Junqi (ANL)

**Session Classification:** Detector WG PID

Contribution ID: 62

Type: **not specified**

## **A LGAD-based Time-of-Flight System for EIC - leveraging experience from the HL-LHC upgrade**

*Thursday, 19 March 2020 14:45 (20 minutes)*

**Presenter:** LI, Wei (Rice University)

**Session Classification:** Detector WG PID

Contribution ID: 63

Type: **not specified**

## Dual Ring Imaging Cherenkov status

*Thursday, 19 March 2020 15:20 (20 minutes)*

**Presenters:** CISBANI, Evaristo (Italian National Institute of Health and Italian Institute of Nuclear Physics); CONTALBRIGO, Marco (INFN Ferrara)

**Session Classification:** Detector WG PID

Contribution ID: 64

Type: **not specified**

## **The high-performance DIRC detector for the Electron Ion Collider detector**

*Thursday, 19 March 2020 15:40 (20 minutes)*

**Presenter:** KALICY, Grzegorz (ODU)

**Session Classification:** Detector WG PID



Contribution ID: 65

Type: **not specified**

## **mRICH for EIC - past, present and future**

*Thursday, 19 March 2020 16:30 (20 minutes)*

**Presenter:** HE, Xiaochun (Georgia State University)

**Session Classification:** Detector WG PID

Contribution ID: **66**

Type: **not specified**

## Quintuple-GEM Based RICH Detector for EIC

*Thursday, 19 March 2020 16:50 (20 minutes)*

**Presenter:** GARG, Prakhar (Stony Brook University)

**Session Classification:** Detector WG PID

Contribution ID: 67

Type: **not specified**

## High Momentum PID at EIC (in 10 years from now)

*Thursday, 19 March 2020 17:10 (20 minutes)*

**Presenter:** DALLA TORRE, Silvia (INFN, Trieste)

**Session Classification:** Detector WG PID

Contribution ID: **68**

Type: **not specified**

## **General discussion on the working plan and deliverables for the Pavia workshop**

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Session Classification:** Detector WG PID

Contribution ID: **69**

Type: **not specified**

## Plan and Workflow

*Friday, 20 March 2020 08:30 (5 minutes)*

**Presenter:** FATEMI, Renee (University of Kentucky)

**Session Classification:** Physics WG Inclusive

Contribution ID: 70

Type: **not specified**

## **Nuclear shadowing in DIS for future electron-ion colliders**

*Friday, 20 March 2020 08:35 (15 minutes)*

**Presenter:** KRELINA, Michal (FNSPE Czech Technical University in Prague)

**Session Classification:** Physics WG Inclusive

Contribution ID: 71

Type: **not specified**

## **EIC impact on unpolarized PDFs: a preliminary study**

*Friday, 20 March 2020 08:50 (15 minutes)*

**Presenter:** ACCARDI, Alberto (Hampton U. and Jefferson Lab)

**Session Classification:** Physics WG Inclusive

Contribution ID: 72

Type: **not specified**

## Wish List

*Friday, 20 March 2020 09:05 (15 minutes)*

**Presenter:** OLNESS, Fredrick (SMU)

**Session Classification:** Physics WG Inclusive



Contribution ID: 73

Type: **not specified**

## **Constraining the unpolarized proton PDFs at EIC through inclusive measurements**

*Friday, 20 March 2020 09:20 (15 minutes)*

**Presenter:** CHU, Xiaoxuan (BNL)

**Session Classification:** Physics WG Inclusive

Contribution ID: 74

Type: **not specified**

## Kinematic reconstruction methods

*Friday, 20 March 2020 09:35 (15 minutes)*

**Presenter:** SURROW, Bernd (Temple University)

**Session Classification:** Physics WG Inclusive

Contribution ID: 75

Type: **not specified**

## Charm production in CCDIS at EIC

*Friday, 20 March 2020 09:50 (15 minutes)*

**Presenter:** NAM, Jae (Temple University)

**Session Classification:** Physics WG Inclusive

Contribution ID: 76

Type: **not specified**

## Vertex Level Events

*Friday, 20 March 2020 11:00 (30 minutes)*

**Presenter:** SATO, nobuo (Jefferson Lab)

**Session Classification:** Physics WG Inclusive

Contribution ID: 77

Type: **not specified**

## Detector Level Events

*Friday, 20 March 2020 11:30 (30 minutes)*

**Presenter:** SCHMOOKLER, Barak (Stony Brook University)

**Session Classification:** Physics WG Inclusive

Contribution ID: 78

Type: **not specified**

## Reconstruction

*Friday, 20 March 2020 12:00 (30 minutes)*

**Presenter:** FATEMI, Renee (University of Kentucky)

**Session Classification:** Physics WG Inclusive

Contribution ID: 79

Type: **not specified**

## Introduction to YR-Tracking WG and activities

*Thursday, 19 March 2020 14:00 (15 minutes)*

**Presenter:** GNANVO, Kondo (University of Virginia)

**Session Classification:** Detector WG Tracking

Contribution ID: **80**

Type: **not specified**

# Survey of Silicon Detector Technologies

*Thursday, 19 March 2020 14:15 (15 minutes)*

**Presenter:** GONELLA, Laura

**Session Classification:** Detector WG Tracking



Contribution ID: **81**

Type: **not specified**

## ITS3 Technology

*Thursday, 19 March 2020 14:30 (15 minutes)*

**Presenter:** GREINER, Leo (LBNL)

**Session Classification:** Detector WG Tracking

Contribution ID: **82**

Type: **not specified**

## Survey of Gaseous Detector Technologies

*Thursday, 19 March 2020 14:45 (10 minutes)*

**Presenter:** GNANVO, Kondo (University of Virginia)

**Session Classification:** Detector WG Tracking

Contribution ID: 83

Type: **not specified**

## Report on eRD6 and eRD22 activities

*Thursday, 19 March 2020 14:55 (20 minutes)*

**Presenter:** POSIK, Matt (Temple University)

**Session Classification:** Detector WG Tracking

Contribution ID: **84**

Type: **not specified**

# Cylindrical Micromegas for the Central Tracking

*Thursday, 19 March 2020 15:15 (10 minutes)*

**Presenter:** BOSSU, Francesco (CEA-Saclay)

**Session Classification:** Detector WG Tracking

Contribution ID: 85

Type: **not specified**

# Drift Chambers and Straw Tubes for Central Tracking

*Thursday, 19 March 2020 15:25 (20 minutes)*

**Presenter:** GRANCAGNOLO, Franco

**Session Classification:** Detector WG Tracking

Contribution ID: **86**

Type: **not specified**

## **sTGCs for the End Cap Tracking**

*Thursday, 19 March 2020 15:45 (15 minutes)*

**Presenter:** BRANDENBURG, Daniel (Brookhaven National Laboratory)

**Session Classification:** Detector WG Tracking

Contribution ID: 87

Type: **not specified**

## Introduction to YR-Tracking WG Simulation

*Thursday, 19 March 2020 16:30 (15 minutes)*

**Presenter:** ELIA, Domenico (INFN Bari)

**Session Classification:** Detector WG Tracking

Contribution ID: **88**

Type: **not specified**

## Overview of Tracking Simulation needs and Plans

*Thursday, 19 March 2020 16:45 (30 minutes)*

**Presenter:** JACAK, Barbara

**Session Classification:** Detector WG Tracking



Contribution ID: 89

Type: **not specified**

## Including detector services in simulations

*Thursday, 19 March 2020 17:15 (15 minutes)*

**Presenter:** GREINER, Leo (LBNL)

**Session Classification:** Detector WG Tracking

Contribution ID: **90**

Type: **not specified**

## Open Discussion

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Presenter:** ALL

**Session Classification:** Detector WG Tracking

Contribution ID: **91**

Type: **not specified**

# Initial considerations for EIC detector EMCAL

*Thursday, 19 March 2020 14:00 (35 minutes)*

**Presenter:** BAZILEVSKY, Alexander (BNL)

**Session Classification:** Detector WG Calorimetry

Contribution ID: 92

Type: **not specified**

# Electromagnetic calorimetry technologies for EIC

*Thursday, 19 March 2020 14:35 (30 minutes)*

**Presenter:** HORN, Tanja (Cath)

**Session Classification:** Detector WG Calorimetry

Contribution ID: 93

Type: **not specified**

## Jet detection requirements for the EIC calorimeters

*Thursday, 19 March 2020 15:05 (25 minutes)*

**Presenter:** PAGE, Brian (Brookhaven National Laboratory)

**Session Classification:** Detector WG Calorimetry

Contribution ID: 94

Type: **not specified**

# Hadronic calorimetry technologies for EIC

*Thursday, 19 March 2020 15:30 (30 minutes)*

**Presenter:** TSAI, oleg (ucla)

**Session Classification:** Detector WG Calorimetry

Contribution ID: 95

Type: **not specified**

## Streaming readout simulation: activity at JLab

*Friday, 20 March 2020 11:00 (30 minutes)*

**Presenter:** Dr UNGARO, Maurizio (Jefferson Lab)

**Session Classification:** Detector WG Electronics/DAQ

Contribution ID: 96

Type: **not specified**

## Spectroscopy overview/theory

*Thursday, 19 March 2020 16:30 (30 minutes)*

**Primary author:** PILLONI, Alessandro (ECT\*)

**Presenter:** PILLONI, Alessandro (ECT\*)

**Session Classification:** Physics WG Semi-Inc



Contribution ID: 97

Type: **not specified**

## Spectroscopy experiment

*Thursday, 19 March 2020 17:00 (30 minutes)*

**Presenter:** STEVENS, Justin (William & Mary)

**Session Classification:** Physics WG Semi-Inc

Contribution ID: 98

Type: **not specified**

## Di-hadron fragmentation update

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Presenter:** VOSSEN, Anselm (Duke University)

**Session Classification:** Physics WG Semi-Inc

Contribution ID: 99

Type: **not specified**

## **Lambda fragmentation related measurements**

*Friday, 20 March 2020 08:30 (30 minutes)*

**Presenter:** ZHANG, Jinlong (Stony Brook University)

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **100**

Type: **not specified**

## **(nuclear) Fragmentation function related measurements**

*Friday, 20 March 2020 09:00 (30 minutes)*

**Presenters:** VAN HULSE, Charlotte; VAN HULSE, Charlotte

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **101**

Type: **not specified**

## Quark Sivers/TMD related measurements

*Friday, 20 March 2020 09:30 (30 minutes)*

**Presenter:** PROKUDIN, Alexei (Penn State Berks)

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **102**

Type: **not specified**

## Parton helicity related measurements

*Friday, 20 March 2020 10:00 (30 minutes)*

**Presenter:** ASCHENAUER, E. C. (BNL)

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **103**

Type: **not specified**

## **Gluon Sivers related measurements**

**Presenter:** ZHENG, Liang

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **104**

Type: **not specified**

## **TMD measurements in Jets**

**Presenter:** RINGER, Felix (UC Berkeley/LBNL)

**Session Classification:** Physics WG Semi-Inc



Contribution ID: **105**

Type: **not specified**

## Detector needs for Inclusive Reactions

*Friday, 20 March 2020 14:00 (10 minutes)*

**Presenters:** SCHMOOKLER, Barak (Stony Brook University); FATEMI, Renee (University of Kentucky); SATO, nobuo (Jefferson Lab)

**Session Classification:** Inclusive/SIDIS/Jets/HQ / DWG

Contribution ID: **106**

Type: **not specified**

## **Spectator tagging in deuteron breakups and kinematics determination using BeAGLE generator**

*Thursday, 19 March 2020 16:30 (30 minutes)*

**Presenter:** TU, Zhoudunming (BNL)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **107**

Type: **not specified**

## **Detector requirements/input for Heavy Flavor**

*Friday, 20 March 2020 14:15 (10 minutes)*

**Presenters:** SICHTERMANN, Ernst (Lawrence Berkeley National Laboratory); VITEV, Ivan (LANL)

**Session Classification:** Inclusive/SIDIS/Jets/HQ / DWG

Contribution ID: **108**

Type: **not specified**

## Detector requirements/input for Jets

*Friday, 20 March 2020 14:30 (10 minutes)*

**Presenter:** PAGE, Brian (Brookhaven National Laboratory)

**Session Classification:** Inclusive/SIDIS/Jets/HQ / DWG

Contribution ID: **109**

Type: **not specified**

## **Detector requirements/input for SIDIS**

*Friday, 20 March 2020 14:45 (10 minutes)*

**Presenter:** STEVENS, Justin (William & Mary)

**Session Classification:** Inclusive/SIDIS/Jets/HQ / DWG

Contribution ID: **110**

Type: **not specified**

## **Update on detection of SRC nucleons in QE kinematics**

*Thursday, 19 March 2020 17:00 (30 minutes)*

**Presenter:** HAUENSTEIN, Florian (ODU)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **111**

Type: **not specified**

## **PID Request to PWG / Discussion**

*Friday, 20 March 2020 15:00 (30 minutes)*

**Presenter:** HEMMICK, Thomas (Stony Brook University)

**Session Classification:** Inclusive/SIDIS/Jets/HQ / DWG

Contribution ID: **112**

Type: **not specified**

## **Semi-inclusive DIS measurements on $A=3$**

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Presenter:** NGUYEN, Dien (MIT)

**Session Classification:** Physics WG Diffraction and Tagging



Contribution ID: 113

Type: **not specified**

## **Perspectives on diffractive jet production at the EIC” Michael Klasen**

*Friday, 20 March 2020 08:30 (30 minutes)*

**Presenter:** Prof. KLASSEN, Michael (University of Münster)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **114**

Type: **not specified**

## **Inclusive diffraction at future Electron - Ion colliders**

*Friday, 20 March 2020 09:00 (30 minutes)*

**Presenter:** STASTO, Anna (Penn State University)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: 115

Type: **not specified**

## **Coherent vector meson production off heavy nuclei - lessons from studies of ultraperipheral collisions at the LHC**

*Friday, 20 March 2020 09:30 (30 minutes)*

**Presenter:** STRIKMAN, Mark (PSU)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **116**

Type: **not specified**

## **Probing quantum fluctuations of the nucleon's gluon density with inelastic diffraction at EIC**

*Friday, 20 March 2020 10:00 (30 minutes)*

**Presenter:** WEISS, Christian (Jefferson Lab)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **117**

Type: **not specified**

## **Near threshold photoproduction $a_2(1320)$ and other topics**

*Friday, 20 March 2020 11:00 (30 minutes)*

**Presenter:** KLEIN, Spencer (LBNL)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **118**

Type: **not specified**

## Meson Structure at the EIC

*Friday, 20 March 2020 11:30 (30 minutes)*

**Presenter:** TROTTA, Richard (The Catholic University of America)

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **119**

Type: **not specified**

## Discussion

*Friday, 20 March 2020 12:00 (1 hour)*

**Session Classification:** Physics WG Diffraction and Tagging

Contribution ID: **120**

Type: **not specified**

## **Table of measurements in the Jets and Heavy Flavor Working Group**

*Thursday, 19 March 2020 16:30 (15 minutes)*

**Presenter:** CUNQUEIRO, Leticia (ORNL)

**Session Classification:** Physics WG Jets, HF



Contribution ID: **121**

Type: **not specified**

## **Jets for 3D imaging**

*Thursday, 19 March 2020 16:45 (20 minutes)*

**Presenter:** ARRATIA, Miguel (University of California, Riverside)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **122**

Type: **not specified**

## Heavy flavour reconstruction

*Thursday, 19 March 2020 17:05 (20 minutes)*

**Presenter:** LAI, Yue Shi (UC Berkeley)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **123**

Type: **not specified**

## Jet angularities at the EIC

*Thursday, 19 March 2020 17:25 (20 minutes)*

**Presenter:** PAGE, Brian (Brookhaven National Laboratory)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **124**

Type: **not specified**

## **Table of measurements in the Jets and Heavy Flavor Working Group**

*Friday, 20 March 2020 08:30 (15 minutes)*

**Presenter:** VITEV, Ivan (LANL)

**Session Classification:** Physics WG Jets, HF

Contribution ID: 125

Type: **not specified**

## Double longitudinal spin asymmetries with jets

*Friday, 20 March 2020 08:45 (20 minutes)*

**Presenter:** PETRIELLO, Frank (Northwestern University)

**Session Classification:** Physics WG Jets, HF

Contribution ID: 126

Type: **not specified**

## **The angularity event shapes in DIS at the NNLL accuracy**

*Friday, 20 March 2020 09:05 (20 minutes)*

**Presenter:** MAJI, Tanmay (Fudan U.)

**Session Classification:** Physics WG Jets, HF

Contribution ID: 127

Type: **not specified**

## **Energy-Energy Correlators for TMD physics and reduction of uncertainties due to hadronization**

*Friday, 20 March 2020 09:25 (20 minutes)*

**Presenter:** LI, Haitao (LANL)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **128**

Type: **not specified**

## **LANL plans for heavy flavor, quarkonia and jet studies**

*Friday, 20 March 2020 09:45 (20 minutes)*

**Presenters:** DURHAM, Matt (Los Alamos National Laboratory); Dr LI, Xuan (Los Alamos National Lab)

**Session Classification:** Physics WG Jets, HF



Contribution ID: **129**

Type: **not specified**

## Discussion

*Friday, 20 March 2020 10:05 (25 minutes)*

**Session Classification:** Physics WG Jets, HF

Contribution ID: **130**

Type: **not specified**

# **Modification of heavy flavor in e+A collisions at the EIC**

*Friday, 20 March 2020 11:50 (25 minutes)*

**Presenter:** LIU, Zelong (LANL)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **131**

Type: **not specified**

## Introductory remarks

*Friday, 20 March 2020 08:30 (10 minutes)*

**Presenter:** KISELEV, Alexander (BNL)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **132**

Type: **not specified**

# Photo-sensors in a strong magnetic field: options for EIC

*Friday, 20 March 2020 08:40 (20 minutes)*

**Presenter:** XIE, Junqi (ANL)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: 133

Type: **not specified**

## **Forward gaseous RICH performance in the EIC-sPHENIX solenoid fringe field**

*Friday, 20 March 2020 09:00 (15 minutes)*

**Presenter:** HUANG, Jin (Brookhaven National Lab)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: 134

Type: **not specified**

## **BeAST solenoid magnetic field calculation and accompanying studies**

*Friday, 20 March 2020 09:45 (15 minutes)*

**Presenter:** KISELEV, Alexander (BNL)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: 135

Type: **not specified**

## **Low Pt track cutoff implications of a strong solenoid magnetic field**

*Friday, 20 March 2020 09:15 (15 minutes)*

**Presenter:** FURLETOVA, Yulia (Jefferson Lab)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **136**

Type: **not specified**

## **Momentum resolution and magnetic field strength for an EIC detector**

*Friday, 20 March 2020 09:30 (15 minutes)*

**Presenter:** LUKOW, Nick (Temple University)

**Session Classification:** Detector WG Central Detector / Magnet



Contribution ID: 137

Type: **not specified**

## **Design considerations for the EIC central detector solenoid (discussion and QA session)**

*Friday, 20 March 2020 10:00 (30 minutes)*

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **138**

Type: **not specified**

## **Technical requirements for the luminosity detector and the low-Q<sup>2</sup>-tagger**

*Thursday, 19 March 2020 16:30 (30 minutes)*

**Presenter:** ADAM, Jaroslav (BNL)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: **139**

Type: **not specified**

## Technical requirements for the lepton polarimeter

*Thursday, 19 March 2020 17:00 (30 minutes)*

**Presenter:** CAMSONNE, Alexandre (JLAB)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: **140**

Type: **not specified**

## **Technical requirements for the different hadron polarimeters**

*Thursday, 19 March 2020 17:30 (30 minutes)*

**Presenter:** EYSER, Oleg (BNL)

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: **141**

Type: **not specified**

## Discussion

*Thursday, 19 March 2020 18:00 (30 minutes)*

**Session Classification:** Detector WG Far Forward Detector + Ancillary detectors / Polarimetry / Luminosity

Contribution ID: **142**

Type: **not specified**

## Background sources and studies at the EIC

*Friday, 20 March 2020 12:15 (20 minutes)*

**Presenter:** ELOUARDHIRI, Latifa (JLab)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: 143

Type: **not specified**

## **Studies of beam-gas background, neutron flux, radiation dose at an EIC**

*Friday, 20 March 2020 12:35 (15 minutes)*

**Presenter:** HUANG, Jin (Brookhaven National Lab)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: 144

Type: **not specified**

## **Synchrotron radiation studies with the present EIC IR vacuum system design**

*Friday, 20 March 2020 11:45 (30 minutes)*

**Presenter:** HETZEL, Charles (BNL)

**Session Classification:** Detector WG Central Detector / Magnet



Contribution ID: 145

Type: **not specified**

## **A possible method for adding services load to the EIC simulations**

*Friday, 20 March 2020 11:00 (20 minutes)*

**Presenter:** GREINER, Leo (LBNL)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **146**

Type: **not specified**

## **EIC detector infrastructure**

*Friday, 20 March 2020 11:20 (25 minutes)*

**Presenter:** BREITFELLER, Mark (BNL)

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **147**

Type: **not specified**

## **Roman Pots at the LHC**

*Friday, 20 March 2020 09:30 (30 minutes)*

**Presenter:** MURRAY, Michael (The University of Kansas (US))

**Session Classification:** Forward Detector/IR integration + Ancillary detectors/Polarimetry/Luminosity

Contribution ID: **148**

Type: **not specified**

## **First-round studies of the EIC's PDF implications**

*Friday, 20 March 2020 10:05 (15 minutes)*

**Presenter:** HOBBS, Timothy (Southern Methodist University and EIC Center@JLab)

**Session Classification:** Physics WG Inclusive

Contribution ID: **149**

Type: **not specified**

## **Gluon Sivers Related Measurements**

*Friday, 20 March 2020 11:00 (25 minutes)*

**Presenter:** ZHENG, Liang

**Session Classification:** Physics WG Jets, HF

Contribution ID: **150**

Type: **not specified**

## **TMD measurements in jets**

*Friday, 20 March 2020 11:25 (25 minutes)*

**Presenter:** RINGER, Felix (UC Berkeley/LBNL)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **151**

Type: **not specified**

## Hadrons in jets

*Friday, 20 March 2020 12:15 (25 minutes)*

**Presenter:** MAKRIS, Yiannis (LANL)

**Session Classification:** Physics WG Jets, HF

Contribution ID: **152**

Type: **not specified**

## Discussion

*Friday, 20 March 2020 12:40 (20 minutes)*

**Session Classification:** Physics WG Jets, HF



Contribution ID: **153**

Type: **not specified**

## DVCS Analysis Framework

*Thursday, 19 March 2020 17:10 (20 minutes)*

**Presenter:** LIUTI, simonetta (universoty of virginia)

**Session Classification:** Physics WG Exclusive

Contribution ID: 154

Type: **not specified**

## **Joint session with the Jet/HF WG**

*Friday, 20 March 2020 11:00 (2 hours)*

**Session Classification:** Physics WG Semi-Inc

Contribution ID: **155**

Type: **not specified**

## Open Discussion

*Friday, 20 March 2020 10:00 (30 minutes)*

**Presenter:** JENTSCH, Alexander (Brookhaven National Lab)

**Session Classification:** Forward Detector/IR integration + Ancillary detectors/Polarimetry/Luminosity

Contribution ID: **156**

Type: **not specified**

## Discussion

*Thursday, 19 March 2020 17:45 (15 minutes)*

**Session Classification:** Physics WG Jets, HF

Contribution ID: **157**

Type: **not specified**

## Testing Lorentz and CPT symmetry at the EIC

*Friday, 20 March 2020 10:20 (15 minutes)*

**Presenters:** LUNGHI, Enrico (Indiana University); SHERRILL, Nathan

**Session Classification:** Physics WG Inclusive

Contribution ID: **158**

Type: **not specified**

## Summary and concluding remarks

*Friday, 20 March 2020 12:50 (10 minutes)*

**Session Classification:** Detector WG Central Detector / Magnet

Contribution ID: **159**

Type: **not specified**

## Particle ID WG Summary

*Saturday, 21 March 2020 09:55 (10 minutes)*

**Presenters:** ROSSI, Patrizia (Jefferson Lab); HEMMICK, Thomas (Stony Brook University)

**Session Classification:** Working Group Summaries

Contribution ID: **160**

Type: **not specified**

## Calorimetry WG Summary

*Saturday, 21 March 2020 10:05 (10 minutes)*

**Presenters:** CHUDAKOV, Eugene (Jefferson Lab); BERDNIKOV, Vladimir (CUA)

**Session Classification:** Working Group Summaries



Contribution ID: **161**

Type: **not specified**

## **Far-Forward/IR/Polarimetry/Ancillary Detectors Summary**

*Saturday, 21 March 2020 10:15 (25 minutes)*

**Presenters:** JENTSCH, Alexander (Brookhaven National Lab); GASKELL, Dave; ASCHENAUER, E. C. (BNL); MURRAY, Michael (The University of Kansas (US)); FURLETOVA, Yulia (Jefferson Lab)

**Session Classification:** Working Group Summaries

Contribution ID: **162**

Type: **not specified**

## DAQ/Electronics WG Summary

*Saturday, 21 March 2020 10:40 (10 minutes)*

**Presenters:** CELENTANO, Andrea (INFN-Genova); NEYRET, Damien (CEA Saclay IRFU/DPhN)

**Session Classification:** Working Group Summaries

Contribution ID: **163**

Type: **not specified**

## **Central detector/Integration and Magnet WG Summary**

*Saturday, 21 March 2020 10:50 (10 minutes)*

**Presenters:** KISELEV, Alexander (BNL); BROOKS, William

**Session Classification:** Working Group Summaries