

California EIC Consortium Collaboration Meeting

Friday, January 27, 2023 - Saturday, January 28, 2023

UCLA, Physics and Astronomy Building

Book of Abstracts

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Understanding Jet Charge

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I discuss simple scaling arguments that largely describe the behavior of the jet charge observable as a function of particle multiplicity for inclusive jet samples and for discrimination of up versus down quark jets.

Friday session 1 / 6

Welcome & Logistics

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Consortium accomplishments in 2022 & UCB/LBNL overview

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LBNL overview

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UCD overview

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UCLA experiment overview

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UCLA theory overview

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UCR overview

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Friday session 2 / 13

regarding DOE RENEW FOA

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Please check DOE FOA here: <https://science.osti.gov/Initiatives/RENEW>, and then click “Nuclear Physics”

Friday session 2 / 14

LANL overveiw

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Friday session 2 / 15

LLNL overview

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R&D (generic, eRD111, eRD113)

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Air Cooling Studies for the EIC Silicon Tracker

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Track finding summary

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Overview of ePIC backgrounds

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Synchrotron radiation background

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Temperature measurements of cooling foam apparatus

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Saturday Morning 1 / 22

Summary of calorimeter insert design and performance

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Saturday Morning 1 / 23

Construction of the first prototype of the calorimeter insert

Saturday Morning 1 / 24

Milling plastic scintillator cells for the calorimeter insert

Saturday Morning 1 / 25

Characterization of scintillator cells for the calorimeter insert

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Saturday Morning 1 / 26

Strontium-90 scanner for calorimeter insert cell-uniformity tests

Saturday Morning 1 / 27

Readout for calorimeter insert prototype and studies with cosmic rays

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Saturday Morning 1 / 28

Simulations for calorimeter insert beamtest (remote)

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Saturday Morning 2 / 29

Results of first test beam of calorimeter insert at JLab

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AI performance with high-granularity calorimeter insert

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SiPM radiation studies for calorimeter insert: plans and simulations

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Status of scattered electron reconstruction in ePIC

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EPIC pECal implementations

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Saturday Afternoon 1 / 34

Coherent and incoherent photoproduction (remote)

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Modeling Backward-Angle Compton Scattering at the EIC

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Energy-energy correlators at EIC

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Heavy flavor physics

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Understanding Jet Charge

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Small-x Gluon Weizsäcker-Williams distribution at NLO

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Collins-type Energy-Energy Correlators and Nucleon Structures

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Jet anisotropy in polarized scattering

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Summary, Adjourn

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Adjourn

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