MC4EIC

CTEQ-EICUG workshop on MC event simulation for the EIC

Welcome

Elke Aschenauer (BNL), Markus Diefenthaler (Jlab), Stefan Hoeche (FNAL), Pavel Nadolsky (SMU)

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Center for Frontiers in Nuclear Science

CTEQ

It is great to see all of you – in such a large numbers – engaging in this workshop

This means you & your loved-ones are safe and sound even in these challenging times

We all hope for normalcy soon and to see you in-person at future meeting

Center for Frontiers in Nuclear Science (CFNS)

https://www.stonybrook.edu/cfns

Setup jointly by Brookhaven National Laboratory and Stony Brook University in 2017 with generous support from the Simons Foundation and NY State to

- promote EIC and EIC science
- support young scientists (especially postdoctoral fellows, students & junior faculty) working on EIC
- Broadly support activities of EIC enthusiasts towards the above goals

The Center Activities:

- a series of annual workshop, postdoctoral fellow & visitors program
- a biweekly seminar program
- diversity is a core value. Initiating an Under-Represented Minority (URM) support for students/post docs: The Edward Bouchet Initiative
- sponsors local and international workshops associated with EIC
- supports EIC User Group activities (EICUG.ORG)

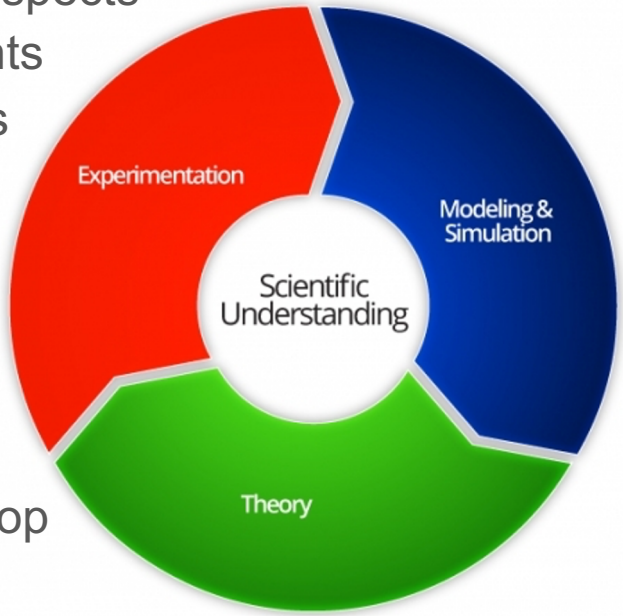
Goals of the workshop series

- Establish a foundation for in-depth look at event generators currently used or developed for the EIC
- Understand precision level needed in these event generators in order to match experimental analysis requirements
- Highlight areas needing exchange between theory and experiment, and establish benchmarks for MC development

- Questions from this kick-off workshop will be addressed at subsequent workshops in the series, jointly organized with the effort on "**MCEG for future ep and eA facilities**"
- Next workshop tentatively to be held in Spring 2022
  Will include in-depth discussions of existing MCs for the EIC

Goals of the workshop series

- Many physics questions & technical MC aspects are similar across facilities and experiments
- MC event generator development benefits from a coherent, cross-cutting approach



- We have included ample time for questions and discussion in the agenda
- **Live notes** to be taken during the workshop
  - Will form the basis for further discussion
  - Be condensed into a workshop summary
  - Become a blueprint for a contribution to Snowmass

Image: https://www.energy.gov/ne/articles/role-modeling-and-simulation-scientific-discovery

Thank you for
Your interest, participation & anticipated contributions
toward the success of this workshop

I want to personally thank the four conveners: Elke, Markus, Pavel and Stefan
And we look forward to working together with CTEQ on such joint activities