

BNL-PO EIC Group Discussion

- What shall we (I) do in the next 10 years?

Kong Tu

BNL

06.06.2022

EIC – My areas & Interests

In my opinion/view, there are 3 major categories:

EIC Detector(s)

reference & (potential) the 2nd

Current roles:

- Provide supports in MC simulations and prod/QA.
- **Physics validations**

Future interest:

- Far-forward detector developments.
- Hands-on hardware project
- 2nd IR and detectors

EIC – My areas & Interests

In my opinion/view, there are 3 major categories:

EIC WP & YR physics

the success of the project

Physics:

- Diffractive and tagging, e.g., VMs production in ep and eA; *Imagining* and/or *saturation* phenomena
- Light-ion physics, specifically with tagging.
- ...

Model developments:

- BeAGLE and related models



EIC Detector(s)

reference & (potential) the 2nd

Current roles:

- Provide supports in MC simulations and prod/QA.
- **Physics validations**

Future interest:

- Far-forward detector developments.
- Hands-on hardware project
- 2nd IR and detectors

EIC – My areas & Interests

In my opinion/view, there are 3 major categories:

EIC WP & YR physics

the success of the project

Physics:

- Diffractive and tagging, e.g., VMs production in ep and eA; *Imagining* and/or *saturation* phenomena
- Light-ion physics, specifically with tagging.
- ...

Model developments:

- BeAGLE and related models



EIC Detector(s)

reference & (potential) the 2nd

Current roles:

- Provide supports in MC simulations and prod/QA.
- **Physics validations**

Future interest:

- Far-forward detector developments.
- Hands-on hardware project
- 2nd IR and detectors



Beyond WP & YP physics

the bonus of the project

New ideas:

- Our “LDRD topics”, e.g., entanglement, spins, etc.
- New EIC physics and *quantum computers*
- ...
- Topics that might be uniquely/better done at a 2nd IR and detector.

As an early-career scientists at BNL-PO

What are the guidance/plans/views of the BNL-PO on early-career scientists?

(esp. in the context of the EIC)

We need to hear from PO too!

Our (my) needs to fulfill the goals:

- Is there any mechanisms to **hear from** /help/guide early-career scientists;
- Is there any mechanisms to promote/encourage early-career scientists;
- Is there any Lab- or department-level programs specifically for helping early-career scientists to establish.