

# ECCE Proposal

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**Proposal and supplementary analysis notes submitted Dec 1st**

**Proposal and analysis notes:** <https://www.ecce-eic.org/ecce-internal-notes>

**Passcode here:**

[https://indico.bnl.gov/event/11531/contributions/48926/attachments/38521/63535/  
ECCE-Bi-Weekly-Meeting-11222021.pdf](https://indico.bnl.gov/event/11531/contributions/48926/attachments/38521/63535/ECCE-Bi-Weekly-Meeting-11222021.pdf)

# Report Card: How did Diff & Tagg WG do?

		Included in the Proposal?	Documented in the proposal?
High Priority	Pion Form Factor	Yes	Yes
	pion structure function	Yes	Yes
	Neutron Spin Structure	Yes	Yes
	eA Diffractive J/psi	Yes	Yes
Low Priority	Upsilon production	No	Yes (Study not completed)
	u-Channel DVCS and pi0	Yes	Yes(Study not started)
Other study	3T vs 1.4T study	Yes (eA Diffractive J/psi)	Yes
	IP6 vs IP8 study	No	Yes

**Completed most of planned tasks!**

# Post proposal work for Diff & Tagg WG

- **Next Step:**
  - **High priority: Completing  $u$ -Channel  $\pi^0$  production at IP6 to justify using PbWO4 in B0 Calorimeter**
  - **IP8 studies**
    - Double Tagged NSS measurement
    - eA Diffractive J/psi at IP8
    - Pion Form factor and Pion structure function study
  - Continuing  $\Upsilon$  production study
  - Sartre Zr table is still on going
- **Special task:**
  - Including scattering beam characteristics at different beam energies and combinations.
    - <https://docs.google.com/spreadsheets/d/1JSEgQmTWf82bxUou8Cossx1oy7G7tlaF75MvrGGdijc/edit?usp=sharing>
  - Refining IP8 design based on suggestion especially around 2nd focus region

# Exclusive WG

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- $\pi^0$  and BH study
- eA DVCS study at IP8

# New Simulation December Concept is ready

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- **Branch used for Diff Tagg r8 (12/7/21)**
- Sartre events for eA diffractive processed successfully.