Proposal for Development and Structuring of Science Working Groups

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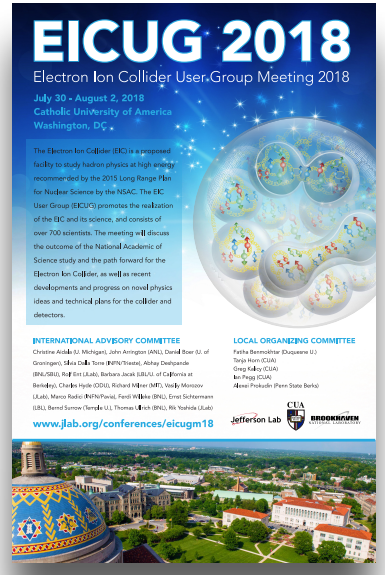
On behalf of the EIC UG Steering Committee



R&D programs / Ad-hoc initiatives / WG groups

- Physics Working Groups:
  - Motivation:
    - INT workshop series was instrumental for the EIC Whitepaper formulation and thus the input to the recently completed NAS study.
    - Moving forward (Beyond CD0) it is essential to engage the entire EICUG with organized working groups
  - INT Working groups / Whitepaper structure:
    - Longitudinal Spin of the Nucleon
    - Confined Motion of Partons in Nucleons: TMDs
    - Spatial Imaging of Quarks and Gluons
    - Physics of High Gluon Densities in Nuclei
    - Quarks and Gluons in Nucleus

R&D programs / Ad-hoc initiatives / WG groups

- Physics Working Groups:
  - Goal:
    - Identify topics either not covered or topics which need to be updated
    - Identify systematic / experimental challenges to be solved
    - Identify theory / phenomenology aspects to be addressed
    - Provide bridge to other technical working groups
    - Prepare for upcoming CD process / Input
  - Physics WG organization:
    - Organization around physics topics?
    - Organization around probes?

R&D programs / Ad-hoc initiatives / WG groups

- Physics Working Groups:
  - By physics topics: Follow similar theme as Whitepaper moving forward beyond NAS report / CDO
    - Spin and Unpolarized eN Physics Working Group.
    - TMD eN/eA Physics Working Group
    - Spatial Imaging eN/eA Working Group
    - High-parton density Working Group
    - Hadronization Working Group
    - Other WG: EW / BES / Spectroscopy
  - By probes: Detector design issue are coupled to the precision required for specific probes.
    - Jets: Jet algorithms: Finding Jets, Jet shape: gluon, quark, di-quark
    - Heavy Flavor: Charm, Beauty / Tau
    - Target-ion final-state reconstruction
    - Parity Violation
    - Positrons: Performance requirements