editorial/project team update

Peter Steinberg, BNL/ ECCE biweekly meeting / 30 August 2021

ecce editorial/project team: Tom Cormier, Richard Milner, PAS

It begins…

- **Lots of action in the ecce-editorial GitHub organizations (ecce-proposal & ecce-notes)**
  - Please make sure you have a GitHub account so you can participate in commenting, etc.

- **SC contributing to ecce-proposal/ecce-proposal-eic-cfp**
  - Policy now clarified: SC/editorial get write access, others can request read access

- **New notes created**

Name	Topic	Responsible
ecce-note-phys-2021-01	Jet physics	Tristan Protzman
ecce-note-phys-2021-02	Diffraction & tagging main note	Bill Lee & Axel Schmidt
ecce-note-phys-2021-03	Exclusive processes main note	Rachel Montgomery & Julie Roche
ecce-note-det-2021-01	ECCE magnet	John Lajoie
ecce-note-comp-2021-01	ECCE computing plan	Cristiano F & David L

- **Master directory for note github/overleaf to be posted on ECCE internal site**

- **A few comments**
  - Please clarify your strategy within your group/subgroup (one big one, or many small ones) and communicate that within the group
  - When requesting a specific note (email to me), please provide editorial committee list of overleaf account emails for collaborators
  - When working on overleaf, please push your work to github after you finish for the day!

ECCE talk management

- **One proposal**
  - Some recent discussions on how to distribute talks to collaboration, both internally (e.g. for IB meetings) and externally (e.g. for conferences)
  - Do we want a similar mechanism for talks as for notes, ie. on GitHub?
  - Upside: persistent comments, well-defined mechanism for replies, well-defined “final” internal copy of the slides
  - Downside: a bit more overhead than emailing to public lists
  - Another option is posting draft via discourse and posting replies there

- **And a reminder:**
  - ECCE policy is to post public talks on Zenodo
  - Please contact me for help if you need it, e.g. for EICUG talks
    - *Will also post instructions to the ECCE wiki ASAP*

Physics notes

3.2 B. Physics

3.2.1 1. Inclusive processes

3.2.1.1 a. Resolution studies:

1. Resolution studies: Comparison of different reconstruction methods (lepton, Jacquet-Blondel, double-angle)
2. Resolution studies: Resolutions at different kinematics (relevant for fast-smearing studies)
3. Background simulation studies: Purity/contamination, uncertainties
4. Physics analysis: Unpolarized structure functions F_2, F_L
5. Physics analysis: Low Q^2 studies
6. Physics analysis: Polarized structure function g_T

3.2.2 2. Semi-inclusive DIS

1. Kinematic DIS and SIDIS resolutions
2. Sivers/Collins simulation and results
3. SIDIS helicity simulation and results
4. Di-hadron simulation and results
5. Spin-independent TMDs simulation and results

3.2.3 3. Exclusive processes

1. DVCS (eP)
2. DVCS (He)
3. DVMP (J/Ψ)
4. DVMP (π^0)

3.2.4 4. Diffraction & tagging

1. Meson form factors
2. Meson structure functions
3. Neutron spin structure
4. Diffractive J/Ψ in eA
5. U-channel π^0 production
6. Short-range correlations in quasi-elastic eA

3.2.5 5. Jets and heavy flavor

1. D and B meson R_{eA}
2. Charmonium R_{eA}
3. Jet R_{eA}
4. HF mass distribution ($\rightarrow$ mass resolution, S/B)
5. JER, JES, jet angular resolution

3.2.6 6. BSM & precision electroweak

1. Extraction of $\sin^2\theta_W$ from eD 18×100
2. Extraction of $F_1^{\gamma Z}$, $F_3^{\gamma Z}$ from ep (two energies combined) and eD (two energies combined)
3. Possible limit on BSM physics in AV and VA channels (g_{AV}, g_{VA} analysis) – collaboration with theory groups
4. Analysis of $e \rightarrow \tau$ (CLFV)
5. Analysis of CC physics (mass limit on right-handed W^-)
6. Beam parity quality control: uncertainty on helicity-asymmetry measurements

Collaboration workflow

- **Day to day interaction**
  - Mattermost - CERN service deployed at BNL. Heavily used by sPHENIX already
    - *https://chat.sdcc.bnl.gov*
  - discourse - open source, with an instance at BNL, now heavily used by ECCE
    - *https://discourse.sdcc.bnl.gov*
    - *Think of it as a replacement for a zillion email lists by “categories”, which contain “topics” (essentially email threads)*

- **Document production and distribution**
  - Github - source code management, issue tracking
  - Overleaf - wysiwyg editor
  - Zenodo - document publishing