

Towards an EIC Yellow Report

- What is a Yellow Report?
 - Modelled on CERN Yellow Report series
 - “provides a medium for communicating the work done at CERN where publication in a journal was not appropriate. The yellow report series includes ... reports on detectors ... the criteria being that the audience should be large and the duration of interest long.”
 - A recent example is a report on “Detector technologies for CLIC” arXiv:1905.02520.
 - The EIC Yellow Report will build upon
 - EIC Whitepaper: arXiv:1212.1701 (2nd edition)
 - EIC Detector R&D Handbook
<http://www.eicug.org/web/content/detector-rd>
 - Existing R&D (eRD6, eRD16 and eRD18)
 - New contributors are welcome and encouraged to join
 - Challenge for all of us will be to make this a coordinated effort

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- What is needed for the Yellow Report? (to be discussed)
 - Survey of relevant technology options
 - Status of current R&D and highlight where further R&D is needed
 - Detector requirements (input from physics WG)
 - Define detector layout and performance – table and figures:
 - e.g. $\Delta p_{(T)}/p_{(T)}$ versus $p_{(T)}$; σ_{xy} versus p_T ; M_{inv}
- How to proceed?
 - Things to discuss and keep in mind
 - Identify areas of interest / expertise
 - Common simulation framework / geometry / integration and magnet
 - Define a list of tasks / who will do what / simulation needs
 - Evaluate different technology options – also complementary detector
 - Moving forward – a repository of performance plots