

One Slide Plan

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Planning Toward Write-Up on 2nd IR

Dedicated to show what the second IR design can achieve in terms of vetoing efficiency

- ❑ Conceptual second IR design including 2nd focus
 - ❑ Far-forward detector acceptance
 - ❑ New ep 275 GeV and eAu 110 GeV lattice: 10σ safe-distance cut at RPSF
- ❑ BeAGLE sample (latest version v1.03.02)
 - ❑ Incoherent nuclear fragments distribution (generator level)
- ❑ Vetoing efficiency
 - ❑ Rejection power described in EIC YR
 - ❑ Vetoing procedure (each far-forward detector)
- ❑ More thinking to add 😊 (to-do-list)
 - ❑ Beampipe impact (similar to IR-6 updated beampipe geometry)
 - ❑ Hint of reconstruction possibility on heavy nuclei (by looking into ZDC energy deposit or RPSF tracking efficiency or hit distribution with extra material added)
 - ❑ Various (in)coherent samples such as O, Cu, Zr, other than Pb (what 10σ safe-distance cut?)
- ❑ Reconstruction (with coherent event and tagging all final-state particles) next dedicated work?