

Contribution ID: 748 Contribution code: contribution ID 748

Type: Poster

The Unseen: revealing the blind production procedure and experience for NP data

A unique experiment was conducted by the STAR Collaboration in 2018 to investigate differences between collisions of nuclear isobars, a potential key to unraveling one of the physics mysteries in our field: why the universe is made predominantly of matter. Enhancing the credibility of findings was deemed to hinge on blinding analyzers from knowing which dataset they were examining, necessitating efforts by the data production team to investigate and implement new (in our field) blinding practices. With nearly two decades of established machinery intended to provide open data and metadata access in STAR, the breadth of details to consider for a successful blinding process was substantial.

In this presentation, we will review the experience of the first-ever blind data production in high energy collider physics. Considerations of what needed blinding, how to blind it, and from whom, will be discussed. Practical impositions on the selection of data to produce and how to produce it will also be highlighted as tell-tales can arise even where there were operational efforts to avoid them. With the appropriate blinding achieved, analyzers and reviewers have been empowered to focus on the physics of interest.

Significance

The conducted blinding procedure was unique to this point in our field, worth documenting and discussing for the record and any potential future such efforts.

References

Speaker time zone

Compatible with America

Primary authors: VAN BUREN, Gene (Brookhaven National Laboratory); LAURET, Jerome (Brookhaven

National Laboratory)

Presenter: VAN BUREN, Gene (Brookhaven National Laboratory)

Session Classification: Posters: Walnut

Track Classification: Track 1: Computing Technology for Physics Research