Contribution ID: **147** Type: **Talk**

PHENIX heavy ion overview

Thursday 17 July 2025 17:00 (25 minutes)

The PHENIX experiment ceased data taking in 2016, but the collaboration continues to produce impactful results by leveraging its rich dataset and advancing analysis techniques. In this talk, I will present recent PHENIX heavy ion results that offer insight into the time evolution of ion collisions and the mechanisms of hadronization at RHIC energies. These include measurements with clean electromagnetic probes as photons and leptons to constrain space-time dynamics and heavy flavor production, as well as studies of hadron production, collective flow, and Bose-Einstein correlations to explore the bulk medium's properties, energy loss, and hadron formation. I will also summarize the status of persistent puzzles involving baryons, direct photons, and flow-like signals, highlighting PHENIX's enduring role in addressing some of the field's challenging questions.

Internet talk

Yes

Is this an abstract from experimental collaboration?

Yes

Name of experiment and experimental site

PHENIX experiment, Relativistic Heavy Ion Collider (RHIC), Brookhaven National Laboratory (BNL)

Is the speaker for that presentation defined?

Yes

Details

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