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Type: Invited Oral Presentation

## Comparison of predicted and measured collective effects in a fourth generation storage ring

*Thursday 14 August 2025 11:30 (30 minutes)*

Predicting, measuring, and mitigating collective instabilities in storage rings is important to maximize their performance. We will describe our efforts to theoretically compute and characterize collective effects during the design process, and how these continue during early operations. We then show how these predictions compare to measured collective effects at the APS-U, both with and without the harmonic cavity to lengthen the bunch.out using the harmonic cavity to lengthen the bunch.

### Please consider my poster for contributed oral presentation

No

### Would you like to submit this poster in student poster session on Sunday (August 10th)

No

### Footnotes

### Funding Agency

U.S. Department of Energy, Office of Science, Office of Basic Energy Sciences, under contract DE-AC02-06CH11357

### I have read and accept the Privacy Policy Statement

Yes

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**Session Classification:** Beam Dynamics and EM Fields (Invited)

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