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Abstract for an Invited Paper for the APR21 Meeting of the American Physical Society

## **Data Analysis for Cosmic Explorer**<sup>1</sup> DUNCAN BROWN, Syracuse University

Data-analysis software is an integral enabler of observation, experiment, theory, and computation and a primary modality for realizing the discoveries and innovations of astrophysics. I will discuss how data-analysis software enables gravitationalwave astronomy, the free and open source toolkit PyCBC for gravitational-wave astrophysics, and the challenges that the community will face in realizing data analysis for Cosmic Explorerthe proposed U.S. contribution to the third-generation gravitational-wave detector network.

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