BOSTON UNIVERSITY

2024—2025 SPACE PHYSICS SEMINAR SERIES

The AI Transformation in Astronomy

Astronomy is being transformed by the massive amounts of data produced by new and upcoming next-generation observatories. Traditional analysis methods struggle to handle the complexity and scale of this data. AI offers an opportunity, enabling us to process and interpret these datasets in new ways, unlocking insights that were previously beyond reach. In this talk, I'll discuss how AI is changing the way we conduct astronomical research, highlighting the need for models that account for the unique challenges of multivariate, sparse, and noisy data. I'll also share examples of how AI is being applied to extract meaningful physical information, with a focus on the interdisciplinary collaborations needed to advance these efforts.

Monday, October 7th

2:30 - 3:30 p.m.

725 Commonwealth Ave | Room 502

Cecilia Garraffo

Harvard Center for Astrophysics