BOSTON UNIVERSITY

Boston University College of Arts & Sciences
Institute for Astrophysical Research

2025ASTROPHYSICS SEMINAR SERIES

Shake, rattle, and roll: waves, tides, and turbulence in stellar and planetary systems

Today, modern telescopes, planetary science missions, and gravitational wave experiments are collecting a large volume of precise data. Insights from these data are in turn accelerating advances toward accurate and efficient fluid dynamical models of stellar and planetary systems. For example, seismic information carried by waves in Saturn's rings is changing our understanding of giant planets. Tides raised in Jupiter and Saturn similarly tell us about planetary interiors and dynamics. Outside of our solar system, the interactions of exoplanets and stars both with each other and with their environments leave imprints in astronomical survey data. In this talk, I will describe research focused on developing improved, multidimensional models of planets, stars, and their environments that rise to the challenge and opportunity presented by modern astronomical observations.

Monday, March 24th

2:30 - 3:30 p.m.

725 Commonwealth Ave | Room 502

Janosz Dewberry

CITA - University of Toronto