BOSTON UNIVERSITY Boston University College of Arts & Sciences Center for Space Physics

2019–2020 SPACE PHYSICS SEMINAR SERIES

What turned on the ionosphere conveyor belt?

The ionosphere is not a still body of plasma. Similar to the ocean conveyor belt, there is constant motion in the ionosphere forming the ionosphere conveyor belt. Unlike the ocean counterpart, the ionosphere conveyor belt exhibits greater variability. It has been well established that severe space weather impacts could arise from the ionospheric density structures associated with the conveyor belt, which can potentially cause disruption, degradation, or blackout of satellite communications, radar, and high-frequency radio communications. Although much progress has been made on the study of ionospheric space weather in the last decade, many gaps

remain in our understanding of some of the fundamental physical processes. In this seminar, I will discuss the recent research carried out in my group regarding the formation and dynamical evolution of the ionosphere conveyor belt using comprehensive observations and state-of-the-art physics-based numerical models.



Thursday, November 14th 4:00-5:00 p.m. 725 Commonwealth Ave | Room 502

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