

Monday, December 4, 2023

11:00am–11:45am

Benjamin Hooberman

CAS Associate 2022–23, Physics

*Searching for the Next Paradigm Shift
in Physics at the Large Hadron Collider*

The Large Hadron Collider (LHC) at CERN in Switzerland is the world's most powerful particle accelerator and investigates the building blocks of matter and fundamental forces by colliding together high-energy protons. After the 2012 Nobel-prize winning discovery of the Higgs boson at the LHC, the focus has shifted to searching for physics “beyond-the-standard model”, which can alleviate theoretical shortcomings in our understanding of nature, explain the origin of dark matter, and possibly lead the way to a Grand Unified Theory of nature. Supersymmetry is an extension to the standard model that could achieve these goals. Professor Hooberman used his CAS fellowship to travel to CERN and lead the ATLAS Supersymmetry Group, an international team of 250 physicists searching for supersymmetry in data collected by the ATLAS detector at the LHC.

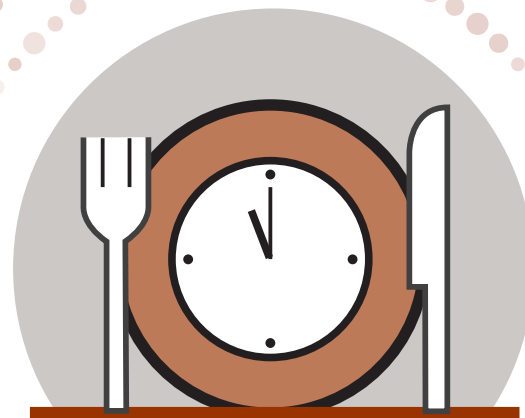
Noon–12:45pm

Kristin Hoganson

CAS Associate 2022–23, History

*Engineering Empire: U.S. Infrastructure
Building in the Circum Caribbean at the
Dawn of the Big Carbon Era*

Professor Hoganson will discuss the involvement of U.S. engineers, concession-holders, and officials in overseas transportation and electrification projects in the early twentieth century. Her research connects efforts to make the Caribbean an “American Lake” via these structures of power to some of their on-the-ground ecological and social implications.



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To request special accommodations,
please contact cas@cas.illinois.edu.