

Please join the Faculty Development Committee for another presentation in a series

**Highlighting Faculty Research for tenure-track  
faculty serving as PI on large awards**

**Friday, April 14, 2023**

**3:30-5:00pm**

**Speare 113**



**Caitano da Silva**

**Assistant Professor**

**Physics Department**

**Langmuir Lab**

**One Million Volts and Many More Mysteries:  
The Modern Science of Lightning**

For thousands of years lightning has been one of the most astonishing natural phenomena, being both frightening and fascinating. Lightning is an important process in the atmospheric energy budget, contributing to the global electric circuit and to the production of nitrogen oxide in the troposphere.

Concurrently, lightning discharges are known to be a major source of damages for a wide range of systems, amounting up to \$5 billion/year economic losses in the U.S., mostly in the air flight and electric power distribution industries. In this talk, we will discuss outstanding fundamental problems in lightning physics, recent discoveries made by our team at Langmuir Lab, and the strange zoo of phenomena that take place in the dark side of thunderstorms.

**Come listen to Caitano's brief talk and then stay for casual  
conversation with Caitano and other colleagues.**

**Light refreshments provided.**