

Speaker: Joshua Weitz

Affiliation: Georgia Institute of Technology

Time: 3:00 pm – 4:00 pm

Title: Asymptomatic Transmission and Pandemic Dynamics: From Principles to Control

Abstract: Asymptomatic transmission represents a double-edged sword. Asymptomatic infections can improve individual-level outcomes by reducing severe cases but lead to more cases overall and even more fatalities at population scales. The first part of the talk will explain the dynamical mechanisms underlying the impact of asymptomatic transmission on epidemic dynamics, including challenges in characterizing the strength, severity, and long-term outcomes of an emerging epidemic. The second part of the talk will highlight ways that epidemic models served as a guide for real-time mitigation and action-taking to reduce asymptomatic transmission of Covid-19 at both local and national scales.