

## **SAFE TIPPING POINT OVERSHOOTS IN INTERACTING SYSTEMS**

SACHA SINET

Cascading tipping, where the tipping of one system leads to the tipping of another, is investigated in leading-following systems. Based on the inverse-square law for safe tipping point overshoot, we emit criteria for the avoidance of cascading tipping in cases when the nonlinear coupling yields finite time overshoot of the following system's tipping point. Analytical results are compared to numerical simulations using climate-relevant conceptual models. Namely, we will discuss the occurrence of an AMOC shutdown originating from the collapse of the Greenland ice sheet, as well as the occurrence of an Amazon rainforest desertification driven by the AMOC shutdown.