Feb. 21	YiMing Princeton	Expert in atmospheric physics and modeling; insights into the mechanisms by which aerosols force changes in atmospheric circulation and climate

Title: Aerosols, Clouds and Regional Hydroclimate

Abstract: This overview talk will be organized along three main themes of my research, namely atmospheric physics processes (aerosols and clouds in particular), regional hydroclimate changes caused by aerosols, greenhouse gases and orbital forcings (using the South Asian monsoon and the West African monsoon as examples), and hierarchical climate modeling. I will also discuss future research directions such as how to use climate models and theories to interpret paleoclimate proxy data, and how to use idealized models to shed light on fundamental climate dynamics. The hope is to convey that aerosols and clouds are central to addressing some of the leading questions in climate science, and observations (paleoclimate proxy data in particular) are critical for constraining climate models and future climate projections.