Both the Next Generation Science Standards (NGSS) and the Common Core State Standards for Mathematics (CCSSM) highlight the importance of disciplinary practices of science, engineering and mathematics. The disciplinary practices outlined in the standards provide a framework that focuses on engaging students in behaviors typical of mathematicians and scientists in order to develop conceptual understanding. In the wake of these reform documents, developing an understanding of scientific and mathematics practices is essential for effective teaching. With limited research studies on disciplinary practice understanding, this presentation uses interview data to consider STEM preservice teacher understanding of disciplinary practices prior to the bulk of their teacher education coursework. This presentation will discuss methods, describe overarching patterns of preservice STEM teacher understanding of individual disciplinary practices and explicit and implicit intersections of practices.

Thursday, October 29, 2020 at 4:00 p.m.