1154-N5-2292 **Andrew Kercher*** (andrew.kercher@mavs.uta.edu). *Factors Influencing the Development of Mathematical Problem Solving of Upper-division Undergraduate and First Year Graduate Mathematics Students.* Preliminary report.

Much extant research already attempts to describe and classify the problem solving methods of both novice and experienced mathematical problem solvers. While such taxonomies may be critical for descriptive and comparative purposes, more research is needed in identifying and examining factors that may influence mathematical problem solving development and to which different problem solving behaviors may be attributed. During an approximately hour long and semi-structured task-based interview, upper-division undergraduate mathematics students and first-year mathematics graduate students were asked to reflect on how their experiences affected the growth of their emergent problem solving behavior. Preliminary analysis using grounded theory techniques indicate that while not all participants felt that their problem solving behavior had been significantly affected by an influential event, others made reference to their involvement in teaching, an unexpectedly difficult or novel classroom experience, or a particular professor's instructional style. In this this talk, I provide examples of each category and compare the self-reported problem solving strategies of the participants with their observed problem solving tendencies. (Received September 17, 2019)