An APOS Analysis of Calculus Student Comprehension of Continuity and Related Topics.

In this study quantitative and qualitative methods were used to investigate Calculus I students’ comprehension of the concepts of function, limit, and continuity. This talk will center on results from participant interviews. Items were designed to inquire about participant understanding of function, limit, and continuity. Participant responses were viewed through the lens of the constructs depicted by Dubinsky’s (1991) Action-Process-Object-Schema theory. A prominent finding was that participants who demonstrated a stronger conception of function displayed a more in-depth understanding of continuity. (Received September 25, 2018)