1014-A0-1594   **Anne E. Brown*** (`abrown@iusb.edu`), IN. *On infinite processes and actual infinity.*

In this talk I will survey recent APOS-based research on the understanding of mathematical infinity. This body of work includes an exploration of the conceptions of infinity that appear in the writings of mathematicians and philosophers in history, as well as empirical research on the conceptions of current college students. Evidence for the hypothesis that actual infinity occurs as the encapsulation of an infinite process will be presented and discussed. (Received September 28, 2005)