Meeting: 1003, Atlanta, Georgia, MAA CP H1, MAA Session on History of Undergraduate Mathematics in America, 1900–2000

1003-H1-295 **Lawrence D'Antonio*** (`ldant@ramapo.edu`), Ramapo College, 505 Ramapo Valley Rd., Mahwah, NJ 07430. *Is There a Student Standard of Truth in Mathematics? : Early Twentieth Century Debate on Calculus Reform.*

American mathematicians of the early 20th century entered into a discussion on the problem of how to teach calculus. Participants in this debate included William Fogg Osgood, W.B. Ford, and E.V. Huntington (who provides the question in the title). In this talk we examine the background of this debate, starting with Osgood's presidential address before the AMS in 1907. A particular feature of interest in this discussion is a series of papers arguing about the proper use of infinitesimals in the calculus course. Specifically, should Duhamel's Theorem be used to define the definite integral and if so, how should this theorem be presented to students? (Received September 08, 2004)