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Lee G. Windsperger* (lwindsperger@winona.edu). *Using a Mathematical Excursion in Calculus to Challenge and Expand Student Understanding of Continuous Functions*. Preliminary report.

In this talk, I will discuss a nonstandard, mathematical excursion which I have used in my calculus courses to uncover the limitations of our basic visualization and understanding of continuous functions. Through this recreational retreat from the standard calculus content, I hope to reveal the definition of generalized functions and the concept of completeness. Furthermore, my goal is to temporarily level the field between students with calculus experience and those without, solidify current and past content knowledge for students, open doors to new opportunities for undergraduate research, and expand the students' view of mathematics. (Received September 20, 2016)