Jose Contreras* (jncontrerasf@bsu.edu). Infinity: A Historical and Cultural Approach. Preliminary report.

The idea of infinity has been present not only in mathematics, but also in other human affairs such as religion and art. Many scholars have examined the idea of infinity, from the ancient Greek philosopher Aristotle to Newton, to Weierstrass, and to Cantor, the conqueror of infinity.

Today, infinity permeates not only mathematics but also the arts and sciences. In this presentation, I will illustrate how I approach the history of infinity, particularly mathematical infinity, in my history of mathematics course. In the presentation, like in class, I will discuss notable people and cultures' contributions to and conceptions about infinity and how people with a diversity of backgrounds (e.g., ethnicity, economic status, national origin, gender, age, religious viewpoints) have used the idea of infinity on their work or have made contributions to the development of the concept of infinity. I will also discuss how Cantor's religious background and viewpoints gave him the courage to persist on investigating the mathematical infinity as a number in spite of the tremendous oppositions to his revolutionary ideas. (Received September 15, 2020)