

Colloquium

January 11, 4:05 p.m. (9^{th} Period) (in the Atrium)

Speaker: Doug Pfeffer

Title: 17th and 18th Century Calculus – A Series Approach

Abstract

The origins of calculus find themselves nestled in 17th and 18th century Europe. During this time mathematics was advanced and developed primarily by bright individuals and not always in concert. This talk traces the methods used to create some of the foundations of calculus by taking a short tour through some of the work produced by Isaac Newton, Gottfried Leibniz, and Leonard Euler. We pay special attention to their use of infinite series and question why, from a modern standpoint, their proofs leave themselves wanting in so many ways.