

Talk Math 2 Me

An Introduction to Fractional Calculus

Ashraf Demian
Friday September 29, 2017
DERR 329
12:00pm- 1:00pm

Abstract

Fractional calculus is a tool which involves taking derivatives or integrals to non-integer orders. In recent decades, fractional order differentiation and integration have been used to study differential equations with real world applications ranging from the natural sciences and engineering to social sciences and economic models. For example, using Mathematica and Matlab, we can use advanced theoretical and computational methods to model the viscoelastic properties of cells. In this session, we will learn how to take the fractional derivative for some functions such as $f(x) = \sin(x)$.

This seminar is sponsored in part by Pi Mu Epsilon and the Texas State University Department of Mathematics. For more information or to sign up to speak, contact Ellen Robinson at ebr21@txstate.edu.