

Differential Equations and Applied Math Seminar

Dr. Nestor Guillen, Texas State

12-1pm October 7th, 2022

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Title: Hamilton-Jacobi equations: what they are and where to find them

Abstract: This talk will be an elementary introduction to Hamilton-Jacobi equations accessible for anyone conversant in multivariable calculus and linear algebra. I will explain how Hamilton-Jacobi equations arise in a variety areas (initially in classical mechanics, and later on in optimal control theory). I will describe how their applications have guided their development of their theory, and highlight similarities and differences with the Laplacian and the heat equation.

Interested faculty, graduate and undergraduate students are encouraged to attend.