Student Seminar

Pi Mu Epsilon
& GAMECOCK MATH CLUB

It is a Nonlinear World

by Victoria Chebotaeva, UofSC Graduate Student

In this talk, we delve into the field of nonlinear differential equations and their profound applications in mathematical modeling for the life sciences. Nonlinearity adds a layer of complexity that reflects the complex dynamics observed in biological/chemical systems, making it a critical tool for accurate representation and analysis. The presentation will develop by explaining the fundamental principles of nonlinear differential equations and systems, revealing their significance for describing the dynamic behavior of biological phenomena. From population dynamics to biochemical reactions, we'll look at a variety of examples that demonstrate the versatility of nonlinear models in explaining real-world complexities.

Victoria Chebotaeva, is a senior PhD student. She obtained her specialist degree (Bachelor + Master) from Moscow State University, the Faculty of Mechanics and Mathematics, department of differential equations. Her research focuses on math modeling of epidemics.

Tuesday 20thFebruary 2024 at 7pm
LeConte 422

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