



# UNIVERSITY OF RHODE ISLAND

Department of Mathematics

## Applied Mathematics and Scientific Computing Seminar

**Location:** Lippitt Hall 204

**Time:** Monday, March 5, 2018, 1:00pm  
(refreshments at 12:50 p.m.)

### What is Financial Mathematics?

by **Dr. Jonathan Chavez-Casillas**

Department of Mathematics, URI

**Abstract:** In this introductory talk, we will discuss very broadly the idea behind financial mathematics. We will first talk about the Time Value of Money and the Money Market, taking then an excursion onto the mathematical models of bonds and stocks to understand then, how these two theories lead to the three main areas in Mathematical Finance: The Black-Scholes arbitrage pricing of options and other derivatives, the Markowitz portfolio optimisation together with the Capital Asset Pricing Model and the study of interest rates and their term structure. Throughout the talk I will try to explore the foundations of those 3 areas and to talk about the current challenges and applications that are leading the area of Math Finance nowadays.

Everyone is encouraged to attend, in particular undergraduate and graduate students.