Title: Mean Value Theorems for Analytic Functions

Abstract: Questions related to the location of zeros and critical points of classes of functions (polynomial, entire, analytic in a certain domain, etc.) are fundamentally important in Analysis. In this talk, he will examine some interesting mean value theorems concerning real and complex analytic functions, focusing on the complex case. He will also present sharper versions of two known results. Part of the presentation will pay tribute to the remarkable contributions of several classical Bulgarian mathematicians to problems involving the distribution of zeros of a function and its derivative(s).

The entire NSU community, including students at all levels of mathematics, is invited and encouraged to attend.

About the speaker: Lubomir Markov holds an undergraduate degree from Sofia University, Bulgaria, and a Ph.D. from the University of South Florida (both in Mathematics). He is a professor with the Department of Math and C.S. at Barry University, where he has taught a variety of basic and advanced courses over the years. His mathematical interests are in the fields of classical analysis and theory of functions, analytic number theory, differential equations, and geometry of Hilbert and Banach spaces. Dr. Markov is an active member of several national and international professional organizations, and has twice served as the President of the Mathematical Association of America – Florida Section (2007-2008 and 2022-2023 terms of office).