

Marco Guzzi – Colloquium Seminar – 11/9/2023
Kennesaw State University

Title: Modern Hadron Colliders Era: proton dynamics, the quest for precision and new physics searches

Abstract:

The CERN Large Hadron Collider (LHC) is the world's biggest and most powerful particle accelerator. At the LHC, high-energy beams of protons traveling at approximately the speed of light collide. I will highlight the role of the LHC and future colliders as precision and discovery machines. I will discuss the physics of the LHC and recent developments in theory and experiments. I will also discuss how our current knowledge of the structure of the proton has an impact on both precision observables and searches for new physics interactions.

Background: Prof. Guzzi is an expert on Quantum field theory of the strong interactions and hadron collider phenomenology. He teaches at Kennesaw State University near Atlanta.