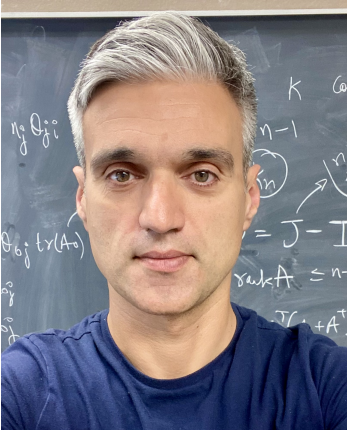# Advanced Research Initiative

MATHEMATICS & PHYSICS

Speaker: Dr. Sebastian Cioaba

Date: 4 November 2024 at 1:00PM

Location: SH 154

Online link: https://bit.ly/3zQRG0J

Title: A brief tour of spectral graph theory

Spectral graph theory is the study of eigenvalues of graphs and their connections to the combinatorial properties of the graphs. In this talk, I will present some of my favorite results in spectral graphs involving graph decomposition and addressing, strongly regular graphs, expanders and spectral characterization of graphs. The talk should be accessible to a broad audience and I will present several open problems.