

Number Theory Program Seminar: Abhiram Kidambi

Tuesday, November 1 · 10:30 – 11:30am

Title: The many faces of number theory in string theory

Abstract: String theory is a surprisingly insightful tool in exploring the relationships between mathematics and physics. It has played a foundational role in many important mathematical discoveries such as mirror symmetry, wall crossing, moonshine phenomena. There are also many interesting number theoretic faces of string theory, ranging from (mock) modular forms to topological modular forms to L functions to Hilbert modular forms to dynamical zeta functions. In this talk, I will give an introduction to some of the number theoretic aspects of string theory (and how they arise) and possibly raise a few open problems that might instigate more conversations and collaborations between mathematicians and string theorists.