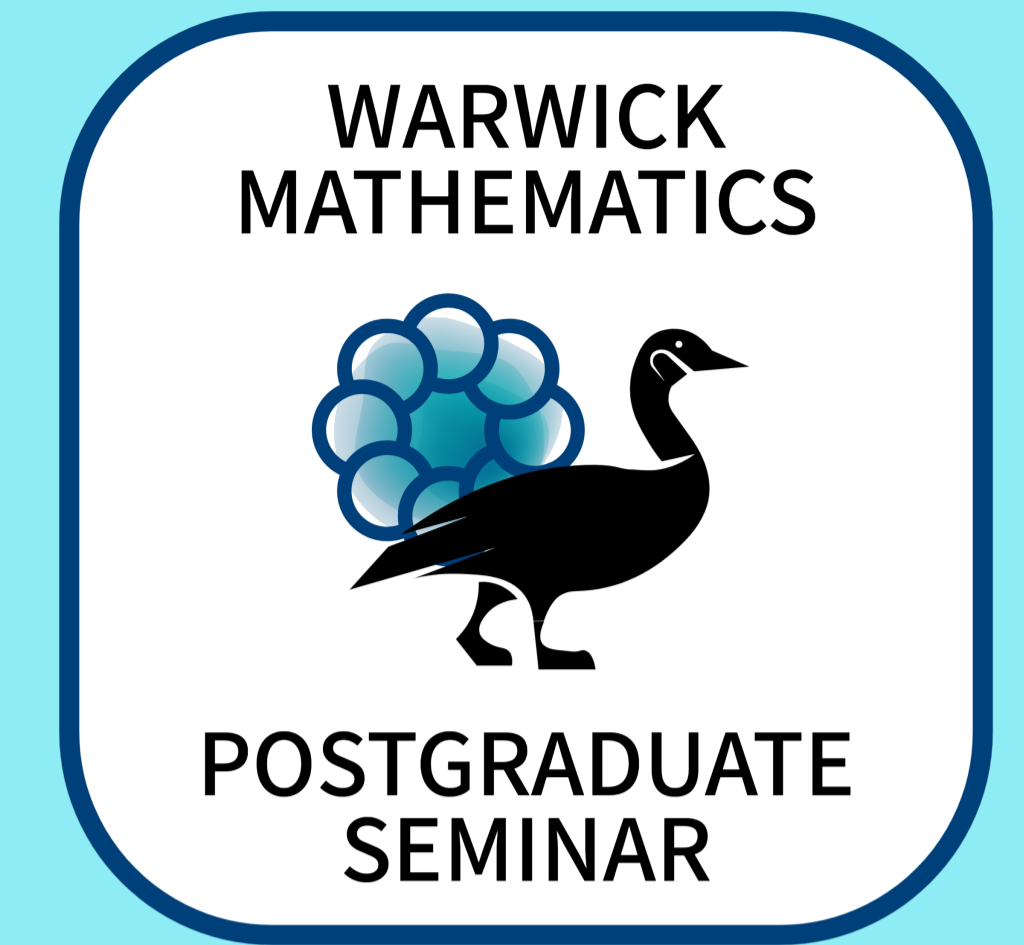


Introduction to special values of zeta functions

Arshay Sheth

Week 3 - Term 2



Abstract

The study of special values of zeta functions is an ancient theme in number theory; nevertheless, it is still a very active and lively area of contemporary research encompassing famous unsolved problems such as the Birch and Swinnerton-Dyer conjecture. In this talk, without assuming any previous background in number theory, we will give an introduction to this fascinating branch of the subject.

We will begin by studying the Brahmagupta-Pell equation, an equation with an extremely rich mathematical history stretching to more than a millennium, and end by exploring how the fundamental properties of this equation are beautifully captured by the first major result in the area of special values of zeta functions: the analytic class number formula.

Time

12 pm, 25th
January 2023

Location

Room B3.02

Organisers

Alvaro Gonzalez Hernandez
Katerina Santicola