



Algebra and Number Theory Seminar

Title: Eisenstein congruences at prime-square level

Speaker: Jackie Lang (Oxford)

Date: Thu 5th November 2020 at 2:00PM

Location: Online

Abstract: Congruences between modular forms have been studied by many mathematicians, starting with some observations of Ramanujan. They have been exploited by number theorists in the last 50 years to prove many deep arithmetic facts. We will give a survey of examples of these congruences and some of their arithmetic applications. Having established the historical context, we will discuss some work in progress with Preston Wake where we study Eisenstein congruences at prime-square level. We will end with an application to proving nontriviality of class groups of a family of number fields.

https://maths.ucd.ie/kazim_b/UCD_ANT_seminar.html