



## Algebra and Number Theory Seminar

**Title:** Hilbert's 12th problem: A p-adic approach

**Speaker:** Jan Vonk (Leiden)

**Date:** Tue 27th October 2020 at 3:00PM

**Location:** Online

**Abstract:** \*Note the irregular day and time\*

The theory of complex multiplication (CM) occupies an important place in number theory, an early manifestation of which was the use of special values of the  $j$ -function in explicit class field theory of imaginary quadratic fields, and the works of Eisenstein, Kronecker, Weber, Hilbert, and many others. I will give an overview of some of the history of the subject of CM theory, and discuss an emerging 'RM theory' that arises when we replace the imaginary quadratic fields in CM theory with real quadratic fields, introduced in joint work with Henri Darmon.

Zoom Link: <https://ucd-ie.zoom.us/j/5963025149?pwd=MFJQSG1GaDhaT2hQdzBjcURvVTYyZz09>

Passcode: The numerator of Riemann zeta at  $-11$ .

[https://maths.ucd.ie/kazim\\_b/UCD\\_ANT\\_Seminar.html](https://maths.ucd.ie/kazim_b/UCD_ANT_Seminar.html)