



Seminar/Talk

# Counting failures of a local-global principle

**Rachel Newton**

University of Reading, UK

Host: Timothy Browning

Methods for solving polynomial equations in the integers and rationals have been sought and studied for thousands of years. Modern approaches try to piece together 'local' (meaning real and  $p$ -adic) information to decide whether a polynomial equation has a 'global' (meaning rational) solution. I will describe this approach and its limitations, with the aim of quantifying how often the local-global method fails within families of polynomial equations arising from the norm map between fields, as seen in Galois theory. I will present results from two joint papers: one with Tim Browning and the other with Christopher Frei and Daniel Loughran

**Thursday, November 28, 2019 02:00pm - 04:00pm**

Heinzel Seminar Room / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station.

Please find a schedule of the ISTA Shuttle on our webpage:

<https://ista.ac.at/en/campus/how-to-get-here/> The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.