



## Mathematics and CS Seminar

# Counting failures of a local-global principle

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**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**

IST Austria Campus Heinzl Seminar Room / Office Bldg West (I21.EG.101)



This invitation is valid as a ticket for the IST Shuttle from and to Heiligenstadt Station. Please find a schedule of the IST Shuttle on our webpage: <https://ist.ac.at/en/campus/how-to-get-here/> The IST Shuttle bus is marked IST Shuttle (#142) and has the Institute Logo printed on the side.