

## ***ALGEBRAIC GEOMETRY AND COMMUTATIVE ALGEBRA SEMINAR***

**Speaker: Richard Birkett**  
**University of Notre Dame**



**Date:** Tuesday, November 30, 2021

**Time:** 2:30 PM

**Location:** 125 Hayes-Healy Hall

**Zoom URL:**

***Lecture Title:***

**Dynamically Stabilising Birational Surface Maps: Two Methods**

***Abstract***

We provide two new approaches to a theorem of Diller and Favre. Namely, a birational self-map  $f : X \dashrightarrow X$  on a smooth projective surface  $X$  is birationally conjugate to a map which is algebraically stable. Among other things, the first approach confirms the validity of a longstanding practical method to stabilise birational maps. Secondly we show that a map becomes algebraically stable if one repeatedly lifts the map to its graph.