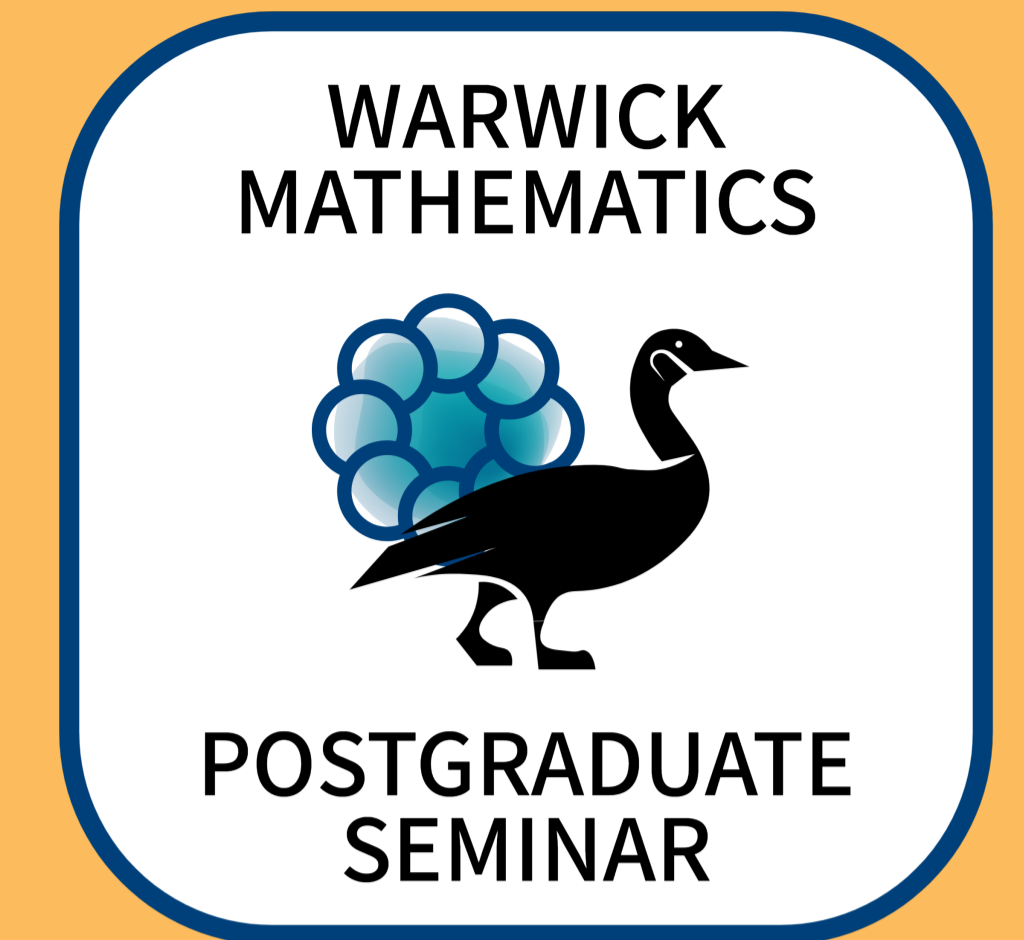


# Is this curve a sphere or a donut?

Marc Truter

Week 7 - Term 3



## Abstract

What does it mean for a curve to be a sphere or even a donut? This question lies in the area of classification, one of the big topics of study in algebraic geometry. A lot of information can in fact be drawn about curves just by knowing how many holes their topological pictures have, that being, whether they are spheres, donuts or even multi holed donuts.

No prior knowledge is expected, with the aim being to give a very visual and introductory explanation of the area. For example, we will try to understand what it means to be a manifold by thinking about sticking paper onto balloons!

### Time

12 pm, 7<sup>th</sup> June  
2023

### Location

Room B3.02

### Organisers

Alvaro Gonzalez Hernandez  
Katerina Santicola