Separators of Cayley graphs

George Kontogeorgiou

Week 1 - Term 3

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MATHEMATICS

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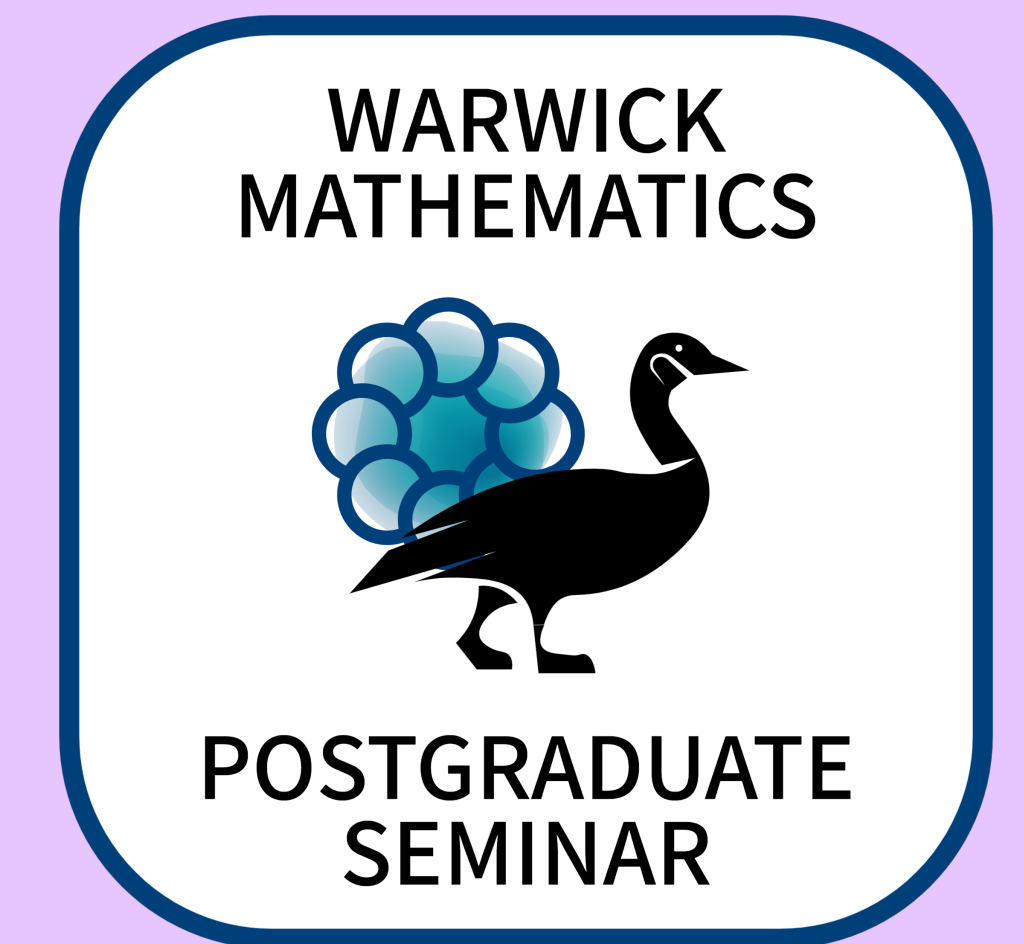
Abstract

We will examine how separators can be used to derive the structure of a group from its Cayley graph. We will discuss two proofs of Stallings' Theorem by Dunwoody and Krön, we will overview the development of accessibility theory, and finally we will see some recent results involving local separators of Cayley graphs. In particular, I will present some recent work concerning local 2-separators in Cayley graphs of finite nilpotent groups (joint with J. Carmesin, J. Kurkofka and W. Turner).

The purpose of this talk is to showcase some ways in which graph theoretic notions, such as cuts and tree decompositions, are useful in geometric group theory.

Time	Location	Organisers
12 pm, 26th April 2023	Room B3.02	Alvaro Gonzalez Hernandez Katerina Santicola