

THE TRIVIAL NOTIONS SEMINAR

Riemann–Roch on Graphs

a talk by

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ABSTRACT

The chip-firing game is a one-player game played on a graph that involves placing poker chips on each vertex and moving the chips along edges under certain rules. I will explain how such a game will lead us to a graphical version of Riemann–Roch theorem. I will not prove the theorem, but instead give many examples and provide some geometric intuition why it's true. Basically, this is because graphs are degenerations of curves. Time permitting, I will also demonstrate how this combinatorial perspective can help us solve questions in algebraic geometry.

Friday, April 7, 2023

1:25pm

Science Center, Room 507