
THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE
Algebraic Geometry and Representation Theory Seminar

on Wednesday, Apr 27, 2022 at 17:00

zoom: <https://weizmann.zoom.us/j/98304397425>

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McKay Trees

Abstract:

In this talk, I will discuss McKay graphs and some recent results on the possible shapes of McKay graphs, joint with A. Aizenbud.

Given a finite group G and its representation ρ , the corresponding McKay graph is a (directed) graph $\Gamma(G, \rho)$ whose vertices are the irreducible representations of G ; the number of edges between two vertices π, τ of $\Gamma(G, \rho)$ is the multiplicity $[\pi \otimes \rho : \tau]$. Such graphs can be seen as a combinatorial tool to encode (part) of the data of the character ring of G . In my talk, I will give some background on these graphs and some of their uses, and then present our recent results on classification of McKay graphs in the shape of (unoriented) trees.