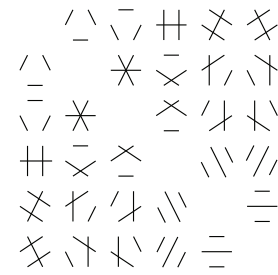


Mathematics Seminar



Rocky Mountain Algebraic Combinatorics Seminar

Zeta functions in asymptotic algebra I: subobject growth

Tobias Rossmann
University of Galway, Ireland

Over the past decades, the study of zeta functions arising from algebraic counting problems has evolved into a distinct branch of asymptotic algebra. An appealing feature of this area is that it constitutes a meeting ground for several different mathematical subjects such as algebra, combinatorics, geometry, and logic. My first talk will be a biased introduction to this area, in particular to the study of zeta functions enumerating subobjects (e.g. subgroups or submodules).

Zeta functions in asymptotic algebra II: orbits and conjugacy classes

Tobias Rossmann
University of Galway, Ireland

My second talk will be motivated by but logically independent of the first. I will focus on recent developments surrounding zeta functions enumerating (mostly linear) orbits of unipotent groups. A key theme will be the development of tools for proving the (somewhat surprising) absence of geometric features (“uniformity”) in certain situations.

Weber 223
4–6 pm, Friday, April 14, 2023
(Refreshments 3:30–4 pm)
Colorado State University
4 pm, Friday, April 14, 2023

This is a joint Denver U / UC Boulder / U of Wyoming / CSU seminar that meets biweekly.
Anyone interested is welcome to join us at a local restaurant for dinner after the talks.



Department of Mathematics
Fort Collins, Colorado 80523