

Schedule Asymptotic Algebra 2025

All talks will take place in room XXX

Thursday, 9 October 2025

13:30 - 14:00	Registration
14:00 - 15:00	Gustavo Fernandez-Alcober (Bilbao) <i>TBA</i>
15:10 - 15:35	Mikel Eguzki Garciarena Perez (Düsseldorf) <i>TBA</i>
15:35 - 16:30	Coffee and Tea
16:30 - 16:55	Alec Schmutz (Bielefeld) <i>Ask zeta functions and hyperplane arrangements</i>
17:00 - 17:25	Felix Zhang (Hagen) <i>TBA</i>
17:30 - 17:55	Noam von Rotberg (Bielefeld) <i>TBA</i>
19:00	Common dinner ??!

Friday, 10 October 2025

9:30 - 9:55	Jianhao Shen (Bielefeld) <i>TBA</i>
10:00 - 10:50	Martina Conte (Bielefeld) <i>TBA</i>
11:00 - 11:30	Coffee and Tea
11:30 - 11:55	Nowras Otmen (Padova) <i>TBA</i>
12:00 - 12:25	Margherita Piccolo (Hagen) <i>TBA</i>

Abstracts

Ask zeta functions and hyperplane arrangements

Alec Schmutz (Universität Bielefeld)

Ask zeta functions are rational generating functions which enumerate average sizes of kernels of matrices of linear forms defined over finite rings. Such zeta functions are of group-theoretic interest, as they relate to the conjugacy class zeta functions of unipotent groups associated with graphs. In this talk, I will outline a connection between ask zeta functions associated with hypergraphs, and certain rational functions attached to hyperplane arrangements. The ask zeta functions we consider are recovered, under suitable substitutions of some variables, by the so-called “flag Hilbert-Poincaré series” of a hyperplane arrangement.