

# BERNOULLIS TAFELRUNDE

MATH STUDENTS AND PHDS SEMINAR

Wednesday, 08.04.2026, 12:15-13:00  
Lecture Room 117, Kollegienhaus

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## Counting Sarkisov links over finite fields

### ABSTRACT

We study configurations of points in the projective plane over a finite field. More precisely we consider Galois orbits of a fixed size  $d$  and in general position. The goal is to count such orbits up to the action of the projective linear group. This counting problem arises in birational geometry, as such orbits correspond to equivalence classes of Sarkisov links, which are elementary birational maps useful in the study of the Cremona group. We develop counting methods to determine the number of such Galois orbits of size  $d=5,6,7,8$ , using tools from group actions.



*Scan before 07.04.2026 to  
register for lunch*