# Kolloquium

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Galois groups of Schubert problems

Schubert calculus is an important class of geometric problems involving linear spaces meeting other fixed but general linear spaces. The Galois group of a problem in Schubert calculus is a subtle invariant that encodes intrinsic structure in its set of solutions. These geometric invariants are difficult to determine in general. However, a rich story concerning Galois groups of Schubert problems is beginning to emerge from experimentation.
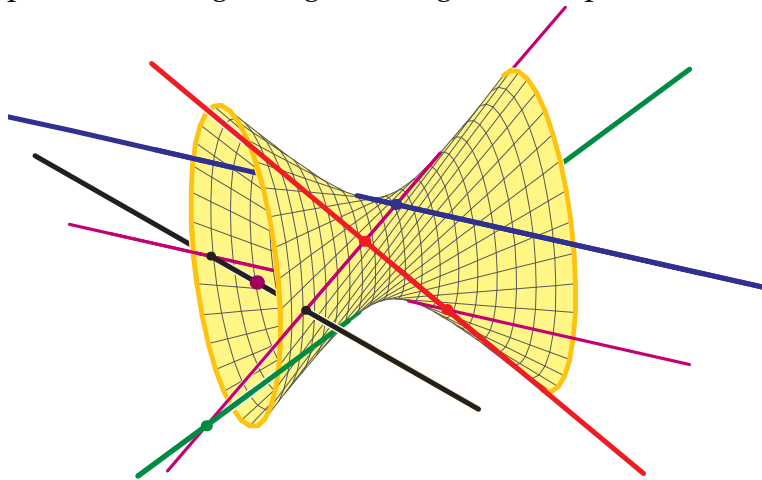
Preliminary results suggest phenomena to study in future large-scale computational experiments. For example, most Schubert problems have highly transitive Galois groups that contain the alternating group, while the rest are only singly transitive, and the intrinsic structure restricting their Galois groups also restricts their possible numbers of real solutions.

In this talk I will describe the background and explain some of the projects aiming to investigate Galois groups of several million Schubert problems.

Do·03·April
16:15·HS·D