

BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

Monday, 28 February, 12:15-13:00

Hybrid seminar

Seminar room 05.002, Spiegelgasse 5 / Zoom

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Action of polynomial automorphisms on valuation spaces

ABSTRACT

I'll present some topics and works of interest in my area, at the intersection between algebra, geometrical group theory and dynamics.

One of the motivation is a better understanding of some subgroups of the group of polynomial automorphisms of the affine space, up to conjugation. It is a widely spread method, when studying a group, to make it act on some space with 'nice properties' (topological, metric. . .). At least in dimension two, I shall present some examples of these spaces, trees, and some for their applications, alongside with the space I am currently working on, a subspace of the space of valuations. Valuations are mathematical tools of great value, and multiple use, in particular in dynamics. I make use of them when studying the dynamical degree of polynomial automorphisms. I'll explain what the dynamical degree is, for its own sake, and also its relation with the initial motivation.