Séminaire d'algèbre, topologie et géométrie Vendredi 9 mai à 14h Salle I

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Cayley Groups.

Following Lemire, Popov and Reichstein, we call a linear algebraic group G over a field k a Cayley group if it admits a Cayley map, i.e., a G-equivariant birational isomorphism over k between the group variety G and its Lie algebra Lie(G). A prototypical example is the classical "Cayley transform" for the special orthogonal group SO_n defined by Arthur Cayley in 1846. A linear algebraic group G is called stably Cayley if $G \times S$ is Cayley for some split k-torus S. We classify stably Cayley semisimple groups over an arbitrary field k of characteristic 0. This is a joint work with Boris Kunyavskiĭ.