

Alex Maier: Research interests

I am a third year PhD student at ETH Zürich under the supervision of Prof. Manfred Einsiedler.

My main interests are dynamics on homogeneous spaces like the torus or $SL_n(\mathbb{R})/SL_n(\mathbb{Z})$ or other quotients. Some theorems by Ratner about classification of measures can be applied to diophantine approximation. One can prove Dirichlet's approximation theorem and its generalizations to higher dimensions, and one can show for which set of numbers this theorem cannot be improved. I am interested whether it is possible to derive some similar results in positive characteristic.