

BERNOULLIS TAFELRUNDE

GRADUATE STUDENT SEMINAR

Monday, 30 May 2022, 12:15-13:00

Hybrid seminar

Seminar room 05.001, Spiegelgasse 5 / Zoom

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Some fun ideas from differential topology in algebraic geometry

ABSTRACT

The idea of studying the geometry of smooth manifolds via differential forms dates back to the 1920's and has proven very powerful. This inspired a lot of algebraic geometry, where it proves equally interesting. In particular topological ideas of "smoothing out" singular spaces have close analogues. The talk will start with the introduction of de Rham cohomology for manifolds and show modern constructions to deal with singularities and hopefully show some recent developments.