Model Theory and Geometry

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TUTORIAL

In this tutorial we will present some aspects of the recent developments of Geometric Model Theory, illustrated by examples from the Model Theory of Fields.

In particular we will use different theories of fields (algebraically closed fields, differentially closed fields, separably closed fields and algebraically closed fields with an automorphism) to introduce the following topics:

- independence, stability and simplicity,
- definable groups,
- local modularity.

We hope to be able to finish by presenting a simple case of one of the applications to algebraic geometry.

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