

## **Rational curves on varieties**

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These lectures will give an introduction to the study of rationally connected varieties. Roughly speaking, these are the varieties which contain “plenty of” rational curves. These include rational and unirational varieties.

The lectures will present the basic methods of manipulating rational curves, leading to a general description of these varieties. We then study the questions of existence of rational curves defined over various fields. The results are quite complete over local fields, leading to a solution of the R-equivalence problem of Manin and to a new proof of Harbater’s theorem on Galois covers of the line.