## Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 12<sup>th</sup> May, 2022: 17:15 - 18:00 Room B7, Exakte Wissenschaften, Bern

## NAFIE TAIRI

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## The Grassmanian as a projective variety

## Abstract

The Grassmannian Gr(k, V) parametrizes the k-dimensional subspaces of a vector space V, and it pops up in many different areas of mathematics. In this talk we present some of its basic algebro-geometric properties. We start by recalling the definition of a (projective) variety. After this the famous  $Pl\ddot{u}cker\ embedding$  will be introduced. Finally, we show that the Plücker embedding allows to see the Grassmannian as a projective variety.