



Leibniz  
Universität  
Hannover

# Oberseminar Institut für Algebraische Geometrie

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## **Brill-Noether loci and degree of irrationality for surfaces**

Given a variety of dimension  $n$ , I will study rational maps to a projective space of the same dimension using the associated kernel (syzygy) sheaf. I will mainly focus on the case of K3 surfaces with Picard rank 1. In this context, I will explain how this perspective allows us to show that maps of degree at most  $d$ , induced by the primitive linear system, move in families. I will then study and characterize, in some cases, projections of minimal degree for primitively polarized K3 surfaces up to genus 14. This can be seen as a preliminary step towards computing the degree of irrationality for these surfaces. This is a joint work with Andrès Rojas.

**Donnerstag, 22.06.2023, 16:30-17:30, F142.**

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**Alle Interessierten sind herzlich eingeladen.**