



## Kolloquium über Reine Mathematik

Einladung zu einem Vortrag

**Dienstag, 26. Oktober 2021**

17 Uhr, Geom H5

**Prof. Dr. Gavril Farkas**  
(Humboldt Universität, Berlin)

Syzygies in algebraic geometry and geometric group theory

Abstract:

Determining the structure of the equations of an algebraic curve in its canonical embedding (given by its holomorphic forms) has been a central question in algebraic geometry from the beginning of the subject. In 1984 Mark Green put forward a very elegant conjecture linking the complexity of the curve in its moduli space to the structure of its equations (syzygies). I will discuss how novel ideas coming from geometric group theory led to a surprising solution of this conjecture for generic curves of arbitrary characteristic and what implications these methods have to important questions in topology.

**Vor dem Vortrag (ab 16.30 Uhr) stehen im Raum 327 Kaffee und Tee bereit.**