Prof. Philippe Michel Chair of Analytic Number Theory (TAN)



## **SEMINAR OF MATHEMATICS**

Monday February 27th, 2017 at 10h15, CIB lecture hall BI A0 448

Assistant Prof. Michael Kemeny (Stanford University)

will present a seminar entitled:

"Syzygies of curves"

## Abstract:

The study of the equations defining projective varieties, and the relations (i.e. syzygies) amongst them has an old and venerable history. First considered around 1850 in the work of Sylvester, the computation of syzygies has remains a central topic in algebra to this day. Much later on, it was realised that syzygies arise naturally in algebraic geometry through the infinitesimal study of maps between moduli spaces. Moreover, Green and Schreyer noticed in the 1980s that there appears to be a deep and mysterious connection between the abstract geometry of an algebraic curve and its syzygies.

We will discuss some recent investigations regarding this connection.

Lausanne, February 23, 2017 / mg