

SEMINAR OF MATHEMATICS

Monday February 27th, 2017 at 14h15, CIB lecture hall [BI A0 448](#)

Dr. Marc Hoyois (*Massachusetts Institute of Technology*)

will present a seminar entitled:

"Vector bundles on algebraic varieties"

Abstract:

The study of vector bundles on algebraic varieties is a classical topic at the intersection of geometry and commutative algebra. In its algebraic form it is the study of finitely generated projective modules over commutative rings. There are many long-standing conjectures and open questions about algebraic vector bundles, such as: is every topological vector bundle over complex projective space algebraic? In recent years, there have been a number of significant developments in this area made possible using the homotopy theory of algebraic varieties introduced by Morel and Voevodsky in the late 90s.

The talk will provide some background on such questions and discuss some of these recent achievements.

Lausanne, February 23, 2017 / mg