Queen's Algebraic Geometry
— Seminar —

Rational higher connectedness and Serre's "Conjecture II"

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Abstract

Rational connectedness and rational simple connectedness are algebro- geometric analogues of path connectedness and simple connectedness, replacing continuous maps from the interval with regular morphisms/holomorphic maps from the complex projective line. In topology, a fibration over a 1-dimensional, resp. 2-dimensional, base and with a path connected, resp. simply connected, fiber always admits a continuous section. I will explain the algebro-geometric analogue of this theorem and how it leads to a proof of Serre's "Conjecture II" from non-Abelian Galois cohomology in the function field case. This is joint work with A. J. de Jong and Xuhua He.

Thursday, November 22, 2007
11:30am – 12:30pm
202 Jeffery Hall