

This semester the Number Theory and Algebraic Geometry seminar KULeuven-Ugent will be devoted to a single subject: the paper

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**Every rationally connected variety over the function field of a curve has a rational point (by Johan de Jong and Jason Starr)**

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This paper proves that a separably rationally connected variety over a function field  $K$  of a curve over an algebraically closed field  $k$  has a  $K$ -rational point. (for  $k$  the field complex numbers this result is due to the second author in collaboration with Tom Graber and Joe Harris). The result is a strong generalisation of Tsen's theorem, which asserts that (for  $K$  as above) any hypersurface in projective  $n$ -space of degree less than or equal to  $n$  has a  $K$ -rational point.

The concept of rationally connectedness has its origins in the Mori program for higher-dimensional birational geometry and it has emerged as an important concept in algebraic geometry. Important geometric techniques and concepts used in the proof of the theorem include deformation theory and Hilbert schemes.

There will be 7 sessions, with the first session either on the 28th of September or the 5th of October (this will be decided next Monday), the second session on the 12th of October and then every fortnight. The seminar is aimed at all researchers in algebraic geometry, including PhD students.

We would be delighted to have participants from other universities than Gent or Leuven. If you would like to participate, or if you would like more information, please send a message to [Joost.vanHamel@wis.kuleuven.be](mailto:Joost.vanHamel@wis.kuleuven.be). If you have colleagues or students not on this mailing list who might be interested, we would be very grateful if you could forward them a copy of this message.