



Inaugural Lecture: Professor Andrei Yafaev
'What makes something special?'

Speaker: Professor Andrei Yafaev, UCL

UCL Contact: Bonita Carboo b.carboo@ucl.ac.uk (*Visitors from outside UCL please email in advance*).

Date/Time: Wednesday, 25 November 2015, 4:00pm

Venue: Room 505, Mathematics Department

Title: What makes something special?

Abstract

In geometry - algebraic geometry in particular, certain objects can naturally be called 'special'. This usually means that they possess extra symmetries that make them stand out from the rest. For example such objects may be acted upon transitively by a certain group. It is desirable (from both theoretical and practical points of view) to be able to characterise these special objects by a property verifiable in practice. They may be characterised by the property of containing many points of a special type. There are other characterisations - they may be characterised by their 'bi-algebraic nature' or in terms of Riemannian geometry (they are totally geodesic manifolds). Proving equivalences between such characterisations is often a difficult (and in some cases unsolved) problem. My research has been mainly concerned with this type of problem. I will present concrete examples, review conjectures and results related to characterisations of 'special objects'. The fascinating aspect of the area is the variety of techniques that can be used, ranging from number theory and geometry to ergodic theory and even mathematical logic.

Details

Celebrating the Inaugural Lecture of Professor Andrei Yafaev in Room 505, Mathematics Department

Programme:

4:00 Introduction to Proceedings, Professor Nick Brook, Executive Dean, Mathematical and Physical Sciences Faculty (MAPS), UCL.

4:10 Inaugural Lecture by Professor Andrei Yafaev 'What makes something special?'

Lecture is chaired by Professor Nick Brook, Executive Dean, Mathematical and Physical Sciences Faculty (MAPS), UCL and introduced by Professor Robb McDonald, Head of Department of Mathematics. Professor Robb McDonald will be giving the vote of thanks.

5:00 Reception in Room 502.

Link: <http://iris.ucl.ac.uk/iris/browse/profile?upi=AYAFA73>