WORKSHOP ON COMPLEX AND ALGEBRAIC GEOMETRY
18 MARCH 2020

Федор Богомолов (ВШЭ & NYU)
Tensors in algebraic geometry

Алексей Голота (ВШЭ)
Minimal models of foliations on threefolds of general type

In my talk I will discuss the interplay between birational geometry of a (three-dimensional) projective variety and properties of (codimension one) foliations the variety can carry. In particular, I will formulate some results towards classification of "special" (i.e. non-general-type, in a certain sense) foliations on threefolds of general type. In addition, I will discuss some applications of these results to Kobayashi hyperbolicity.

Александра Кузнецова (ВШЭ & ENS)
Симплектические некэлеровы многообразия

Я опишу единственный известный пример симплектического некэлерова многообразия. Впервые этот пример был описан в статье Д. Гуана, и затем Ф. Богомолов предложил альтернативную конструкцию, которой я и буду следовать. Затем я расскажу о некоторых свойствах этого многообразия и его автоморфизмов.

Василий Рогов (ВШЭ)
Non-algebraic complex structures on flat manifolds

It is classical that some compact complex manifolds of Kähler type cannot be obtained as analytifications of smooth complex projective varieties. However, existence of such manifolds in a given deformation class impose many interesting restrictions on the geometry of this class. In my talk I'm going to consider the case of manifolds admitting a flat metric. Using methods parallel to those from hyperkähler geometry, I will prove necessary and sufficient conditions for such manifolds to admit a non-algebraic deformation. I will also cover some examples and speculate about further generalisations.