

**КОНФЕРЕНЦИЯ“АЛГЕБРА И ГЕОМЕТРИЯ”  
ЯРОСЛАВЛЬ, 27-28 ИЮЛЯ 2018  
АБСТРАКТЫ ДОКЛАДОВ**

**Frédéric Campana, *Algebraicity of foliations, and applications to moduli***

We show among other things that if  $X$  is a smooth quasi-projective manifold (obtained as the complement of a simple normal crossings divisor in a smooth projective compactification), the log-canonical bundle of  $X$  is big if (and only if) some big line bundle injects in some tensor power of the log-cotangent bundle of  $X$ . Combined with the existence of Viehweg-Zuo sheaves, this permits to establish the so-called Shafarevich-Viehweg hyperbolicity conjecture and some generalisations.

**Илья Итенберг, *Hurwitz numbers for real polynomials***

We introduce a signed count of real polynomials which gives rise to a real analog of Hurwitz numbers in the case of polynomials. The invariants obtained allow one to show the abundance of real solutions in the corresponding enumerative problems: in many cases, the number of real solutions is asymptotically equivalent (in the logarithmic scale) to the number of complex solutions.

This is a joint work with Dimitri Zvonkine.

**Sung Rak Choi, *A product formula for volumes of divisors via Okounkov bodies***

I will prove a product formula for fibre spaces using Okounkov bodies.

**Юрий Прохоров, *Tetragonal conic bundles***

This is joint work in progress with V. Shokurov. I outline an approach to the rationality problem of three-dimensional conic bundles based on the Sarkisov program and Mori theory.

**Юрий Элияшев, *Supercurrents and generalized amoebas***

Recently, Igor Krichever defined a generalization of the amoeba of a complex curve. We proposed a concept of multidimensional generalized amoeba and proved

that the generalized amoebas behave similarly to the classical amoebas. To deal with the generalized amoeba the language of tropical superforms and supercurrents turn out to be useful. In our talk we will report main facts about classical and generalized amoebas and explain how supercurrents can be applied to study geometry of amoebas.

**Надежда Тимофеева, *On a Chow quotient of Grassmannians  $G(2,n)$  by algebraic torus actions***

M. Kapranov in his seminal paper "Chow quotients of Grassmannians" studied Chow quotients of complex Grassmannians under  $(\mathbb{C}^*)^n$ . Chow quotient compactifies space of parameters of the main stratum of the canonical action of  $(\mathbb{C}^*)^n$  on  $G(2,n)$ . In series of papers V. M. Buchstaber and S. Terzic introduce new notion of universal space of parameters of compact torus  $T^n$  on  $G(2,n)$ . V. M. Buchstaber posed a problem: prove that this universal space is homeomorphic to Kapranov's Chow quotient. I will speak about it.

**Иван Чельцов, *Asymptotic invariants of Fano varieties***

I will describe new asymptotic invariant of Fano varieties known as delta-invariant. I will show how to estimate it for smooth cubic surfaces and other (log) del Pezzo surfaces.