

**Семинар Лаборатории Алгебраической геометрии
и ее приложений**

Семинар состоится в пятницу 14 сентября 2018 года.

Начало в 17:00.

Семинар будет проходить по адресу: **ул. Усачева, д.6,**
аудитория 306

На семинаре выступит

**Фёдор
Богомолов**

(Courant Institute, НИУ ВШЭ)



с докладом:

***On j invariants of the projective images
of 4-tuples torsion points***

Abstract: This talk is a continuation of the series of talks I gave last year. In this talk I will discuss the proof of some cases of first of conjecture formulated in our joint article with Hang Fu and Yuri Tschinkel. Namely consider a natural family of elliptic curves E_t in P^1_t (with singular fibers over $(0,1,\infty)$) having a natural subgroup of 2-torsion points and an involution θ which maps them into themselves.

The quotient of the family E_t by θ is a rational family with generic fiber P^1_z over P^1_t . We are considering the 4-tuples of the images of torsion points in P^1_z and j -invariant of the 4-tuples with values in P^1_j . Note that the family of all torsion 4-tuples in all curves P^1_z split into a union of irreducible curves Y_{ω} .

Thus we have a map t,j on every Y_{ω} into $P^1_t \times P^1_j$.

Conjecture The map $t,j: Y_{\omega}$ is rational embedding for all but a few natural exceptions.

I will discuss in my talk several results obtained jointly with Hang Fu supporting this conjecture based on the study on the behavior of torsion points of elliptic curves under multiplicative degeneration.

Приглашаются все желающие!