***Семинар Лаборатории Алгебраической геометрии и ее приложений***

Семинар состоится в пятницу 12 мая 2017 года.

**Начало в 17:00.**

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

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| На семинаре выступитАнатолий Кириллов (University of Kyoto) |  |

с докладом:

***Introduction to Dilogarithm Identities***

**Abstract:** Rigged Configurations and Fomin-Kirillov algebras The Dilogarithm function had been introduced by L. Euler more than $250$ years ago, and since that time the Dilogarithm function has been extensively studied by many mathematicians and physicists including N. Abel, E. Kummer, L. Rogers, S. Ramanujan, L. Lewin, L.D. Faddeev, D. Zagier, A. Goncharov, H. Gangl, A.Al. Zamolodchikov, among many others. Dilogarithm and its quantum analogue have found numerous deep applications in Number Theory, Hyperbolic Geometry, Knot invariants, Algebraic K-theory, Representation Theory, Mathematical Physics and Applied Mathematics. In my talk I'm planning to draw attention of the audience to some remarkable identities for the values of the Rogers dilogarithm function at some very special families of algebraic numbers. These relations admit an interesting interpretation in algebraic K-theory and Conformal Field Theory. I'm planning to talk about Rigged Configuration Bijection (RC-bijection), which originated from the analysis of the Bethe Ansatz Equations for the XXX and XXZ Heisenberg models, and has a big variety of applications to Combinatorics, Representation Theory, Discrete Integrable Systems, among other interesting applications. I'm also planning to talk about some families of quadratic algebras (the so-called "Fomin-Kirillov" type algebras) with applications to Schubert Calculus, Quantum (and Elliptic) Cohomology and K-theory of flag varieties, and beyond.

Reference

Lewin, L. Dilogarithms and Associated Functions. London: Macdonald, 1958.

D. Zagier, The Dilogarithm function in Geometry and Number Theory, Number Theory and related topics, Tata Inst. Fund. Res. Stud. Math. 12 Bombay (1988), 231-249.

Kirillov, A. N. Dilogarithm Identities. Progr. Theor. Phys. Suppl. 118, 61-142, ***Приглашаются все желающие!***