March 20, 2023

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Chopping integrals of the full symmetric Toda system and the QR-decomposition method.

In my talk I will try to answer the following questions: where do the additional integrals of the full symmetric Toda system come from, why they are rational and what does all this have to do with "chopping". If we apply the AKS method, there will remain the question, why do these functions commute, and whether it is possible to find other examples. The known answers were concerned either with straightforward computations, or with the properties of a Gaudin system. In my talk I will show how one can obtain these integrals with the help of some simple differential operators (in the manner of the argument shift method). Besides this, we will discuss the method to solve the corresponding flows by QR decomposition. The talk is based on a joint work with Yu. Chernyakov and D.Talalaev.

SCIENTIFIC SEMINAR
"DIFFERENTIAL GEOMETRY AND APPLICATIONS"

headed by Academician of RAS Anatoly T. Fomenko

The seminar takes place online in ZOOM on Mondays
from 4:45 p.m. to 6:20 p.m. (Moscow time)
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