

Monday, March 31, 2025
from 4:45 p.m. to 6:20 p.m. (Moscow time)
room 16-10 and ZOOM translation

Fedor Yu. Popelenskii

Additive properties of the motivic Steenrod algebra

Modern advances in the calculation of stable homotopy groups are due to the development of new methods originated from the work of Voevodsky. The fundamental article here is the article by Morel and Voevodsky $\mathbb{A}^1$ homotopy theory of schemes (1999), which gave a firm hope that many objects of classical algebraic topology have a motivic analogue. Subsequent development of the theory has shown that new results about classical objects can be obtained within motivic framework. In particular, the motivic Adams spectral sequence, which is constructed on motivic Steenrod, turned out to be important.

The report will describe what the motivic Steenrod algebra mod 2 is for the ground field $\mathbb{C}$ (Voevodsky) and it is shown which of the results of Arnon and Monks about the classical Steenrod algebra mod 2 can be generalized to the motivic case.

**SCIENTIFIC SEMINAR
“DIFFERENTIAL GEOMETRY AND APPLICATIONS”**

headed by Academician of RAS Anatoly T. Fomenko

**The zoom-ref is provided only to registered persons
To be registered, ask any participant of our seminar to endorse you
Announcements of previous talks can be found on the seminar website
<http://dfgm.math.msu.su/chairsem.php>**