

Monday, September 14, 2026, from 4:45 p.m. to 6:20 p.m.
(Moscow time), room 16-10 and ZOOM translation

**A.T. Fomenko, S.A. Galkin,
I.S. Kuznetsova, M.M. Mikhailov,
D.A. Tkachenko, E.D. Shadrina**

Topological Wonders

Topology and geometry contain vivid, easy-to-state, and important themes that may at first seem unexpected and mysterious. We have provisionally called them “wonders.” In fact, they are grounded in deep mathematical facts and theories. Some of them will be briefly discussed in our talks. There will be twenty-four “wonders.” (Of course, we cannot cover every other mathematical wonder as well.) We will present only the statements and the essence of these “wonders,” without details or theorem proofs. If some of them arouse particular interest among the audience, a more detailed presentation can be organized later.

D.A. Tkachenko, A.T. Fomenko.

- (7) p-adic solenoids.
- (9) Antoine’s necklace.
- (10) Fractals.
- (11) On any smooth symplectic manifold M^{2n} there exists a complete commutative (involutive) set of n smooth functions. The question of the existence of polynomials (on an algebraic variety) is far more difficult. Mishchenko–Fomenko–Sadetov for Lie algebras.

S.A. Galkin, A.T. Fomenko.

- (12) Alexander’s sphere.
- (13) Wild knots.
- (14) Sphere eversion in Euclidean space.
- (15) AI solved the Jacobian problem in dimension 3 and higher.

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>