

Monday, October 5, 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.

*E.D. Shadrina, A.T. Fomenko.*

(20) Maurits Cornelis Escher – impossible objects.

- - - - - **Fifth talk** *M.M. Mikhailov, A.T. Fomenko.*

(21) Hinges and signature modelling.

(22) Cable-stayed constructions.

(23) Densest sphere packings.

(24) Confocal quadrics, a film on billiard balls and rigid bodies.

- - - - - — If time remains, the following talk will begin: G.V. Belozеров, I.S. Kuznetsova “Integrable geodesic flows on polyhedral surfaces”. It will continue at the next session on October 19 and will fill it entirely. This talk is closely related to some of the previous Wonders and is, as it were, both concluding and opening up further prospects.

### 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>