

**April 19, 2021**

**Gaiane Yu. Panina**

*A universality theorem for  
stressable graphs in the plane*

Universality theorems (in the sense of N. Mnev) claim that the realization space of a combinatorial object (a point configuration, a hyperplane arrangement, a convex polytope, etc.) can be arbitrarily complicated. We prove a universality theorem for a graph in the plane with a prescribed oriented matroid of stresses, that is the collection of signs of all possible equilibrium stresses of the graph.

This research is motivated by the Grassmanian stratification (Gelfand, Goresky, MacPherson, Serganova) by thin Schubert cells, and by a recent series of papers on stratifications of configuration spaces of tensegrities (Doray, Karpenkov, Schepers, Servatius).

**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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