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*Invariant foliations in phase portraits of gene
networks models*

For piecewise linear dynamical systems of dimensions 3 and 4, considered as models of gene networks functioning, sufficient conditions of existence of invariant surfaces in their phase portraits are described. We construct in these phase portraits invariant foliations with singularities, “books”, all the leaves of these foliations contain cycles of the dynamical systems under consideration. These constructions can be extended to similar dynamical systems of other dimensions.

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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