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Iosif Krasil'shchik

*Basic ideas of PDEs geometric theory:
an overview.*

The foundations of the geometric theory of differential equations were laid down in the classical works of Sophus Lie, written at the end of the 19th century. The modern form of this theory, based on the concept of jet space introduced by S. Ehresmann and the apparatus of differential geometry and homological algebra, was apparently given by A.M. Vinogradov in 1970-80.

The report will give an overview of the most important structures, definitions, constructions and results of this theory. We will talk about symmetries, conservation laws, Backlund transformations, symplectic and Hamiltonian (Poisson) structures, both local and nonlocal, as well as simple examples.

**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)

To get the zoom-ref, or to apply for your talk on the seminar, please, write to
the seminar secretary Alexey A. Tuzhilin tuz@mech.math.msu.su

Announcements of previous talks can be found on the seminar website

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