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*The geometry of inhomogeneous Poisson brackets
and bihamiltonian integrable systems
with dispersion*

Variational Hamiltonian formalism allows one to construct analogues of finite-dimensional objects from Hamiltonian mechanics in the infinite-dimensional case. This makes such formalism an integral part of the theory of infinite-dimensional integrable systems. We introduce the natural class of so called Darboux–Poisson brackets. They naturally appear in applications and yield bihamiltonian systems, some of which are well-known in the literature. Among them are coupled KdV, Camass–Holm equations, Harry Dym equations and many others.

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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