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Affinor Geometry

Affinor metric structure is a generalization of symplectic, contact, Kähler and subriemannian structures for manifolds of arbitrary dimension. Affinor metric structure on manifold M of arbitrary dimension is defined by 1-form on M whose exterior derivative is non-zero exterior 2-form on. The kernel of this 2-form may be either trivial, or an regular distribution on M. In this work such structures are researched for non-trivial kernel case. The geometric properties of such structures are described, as well as curvatures properties, special classes of these structures, and so called sublagrangian and sublegendrian submanifolds determined by these structures are discovered. Affinor metric structures are researched on Lie algebroids, homogeneous spaces, and Lie groups. Also, a generalization of affinor structures is discovered that is called an subtwistor structures, and defined by an degenerated exterior 2-form.

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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