Nijenhuis Geometry: symmetries, conservation laws and applications to geodesically equivalent metrics.

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The talk is devoted to applications of Nijenhuis operators to integrable systems of two kinds, geodesic flows of some special type of Riemannian metrics and quasilinear systems of PDEs of hydrodynamic types. These results are based on simple, but very interesting properties of the so-called gl-regular Nijenhuis operators (`gl-regularity' in the context of Nijenhuis geometry is similar to `non-degeneracy' in the context of Poisson geometry).