

Naturally lifted metrics

Oldrich Kowalski, Charles University, Prague
and
Masami Sekizawa, Gakugei University, Tokyo

Using the concepts and the methods developed by D. Krupka, J. Janyska and V. Mikolášová, we fully classified (during 1986-88) naturally lifted metrics to tangent bundles, linear frame bundles and cotangent bundles over a given Riemannian manifold. All classical constructions of metrics on such bundles are special examples of our lifted metrics. We shall survey our own earlier work and also the later development in the geometrical study of natural metrics.