Title: Chern connection of a pseudo-Finsler metric as a family of affine connections

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We consider the Chern connection of a (conic) pseudo-Finsler manifold (M, L) as a linear connection ∇^V on any open subset $\Omega \subset M$ associated to any vector field V on Ω which is non-zero everywhere. This connection is torsion-free and almost metric compatible with respect to the fundamental tensor g. Then we show some properties of the curvature tensor R^V associated to ∇^V and in particular we prove that the Jacobi operator of R^V along a geodesic coincides with the one given by the Chern curvature.

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