



INTRODUCTION IN POISSON MANIFOLDS WITH LIGHTLIKE KAEHLER FOLIATION

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Abstract

We prove in this paper an existence of lightlike symplectic foliation on pseudo-Riemannian Poisson manifold whose leaf admits a complex structure J (Kählerian). We obtain a generalization of results obtained by Boucetta in [M. Boucetta, Riemann-Poisson manifolds and Kähler-Riemann foliations, C. R. Math. Acad. Sci. Paris 336(5) (2003), 423-428]. Some examples are given.

Keywords and phrases: lightlike submanifolds, Kähler, symplectic and Poisson manifolds, radical and screen distribution.

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