## **Turkish Journal of Mathematics**

## **Turkish Journal**

of

## Mathematics

Keywords Authors



## math@tubitak.gov.tr

Scientific Journals Home Page Transversal lightlike submanifolds of indefinite sasakian manifolds

Cumali YILDIRIM Adıyaman University Faculty of Science and Arts Department of Mathematics 02210 Ad4yaman-TURKEY e-mail:cyildirim@adiyaman.edu.tr Bayram ŞAHİN İnönü University Faculty of Science and Arts Department of Mathematics 44280, Malatya-TURKEY e-mail:bsahin@inonu.edu.tr

<u>Abstract:</u> We study both radical transversal and transversal lightlike submanifolds of indefinite Sasakian manifolds. We give examples, investigate the geometry of distributions and obtain necessary and sufficient conditions for the induced connection on these submanifolds to be metric connection. We also study totally contact umbilical radical transversal and transversal lightlike submanifolds of indefinite Sasakian manifolds and obtain a classification theorem for totally contact umbilical transversal lightlike submanifolds.

Key Words: Indefinite Sasakian Manifold, Lightlike Submanifold, Radical Transversal Lightlike Submanifold, Transversal Lightlike Submanifold

Turk. J. Math., **34**, (2010), 561-584. Full text: <u>pdf</u> Other articles published in the same issue: <u>Turk. J. Math.,vol.34,iss.4</u>.