

5TH IFSCOM2018 ABSTRACT BOOK
ISBN: 978-605-68670-1-9

IFSCOM2018
5TH IFS AND CONTEMPORARY MATHEMATICS CONFERENCE
SEPTEMBER, 05-09, 2018, KAHRAMANMARAS, TURKEY
pp: 51-52

ON MAPS BETWEEN RICCI SOLITONS

ŞEMSI EKEN MERİÇ AND EROL KILIÇ

ABSTRACT

In this paper, we deal with a Riemannian submersion from a Ricci soliton endowed with a concurrent vector field to a Riemannian manifold. Here, we give a characterization for Riemannian submersion admitting a Ricci soliton.

REFERENCES

- [1] Barros A, Vieira Gomes JN, Ribeiro E. Immersion of almost Ricci solitons into a Riemannian manifold. *Math. Cont.* 2011; 40: 91-102.
- [2] Blaga AM, Perkaş SY. Remarks on almost η -Ricci solitons in (ε) -para Sasakian manifolds. 2018; arXiv:1804.05389v1.
- [3] Besse AL. *Einstein manifolds*, Berlin-Heidelberg-New York: Springer-Verlag, 1987.
- [4] B.-Y. Chen, Riemannian submersions, minimal immersions and cohomology class, *Proc. Japan Acad. Ser. A.* 81(2005), 162–167.
- [5] B.-Y. Chen, *Pseudo-Riemannian geometry, δ -invariants and applications*, World Scientific Publishing, Hackensack, NJ, 2011.
- [6] Chen BY, Deshmukh S. Ricci solitons and concurrent vector Field, *Balkan J. Geom. Its Appl.* 2015; 20(1): 14-25.
- [7] Hamilton RS. *The Ricci flow on surfaces*, Mathematics and General Relativity(Santa Cruz, CA, 1986) *Contemp. Math. Amer. Math. Soc.* 1988; 71: 237-262.
- [8] M. Falcitelli, S Ianus, A. M. Pastore, *Riemannian Submersions and Related Topics*, World Scientific Publishing Co.Pte.Ltd., 2004.
- [9] Perelman G. The Entropy formula for the Ricci flow and its geometric applications. 2002; arXiv math/0211159.
- [10] S. Deng, An improved Chen-Ricci inequality, *Int. Electron. J. of Geom.* 2(2009) 39–45.
- [11] Tripathi MM. Certain basic inequalities for submanifolds in (κ, μ) -space, *Recent advances in Riemannian and Lorentzian geometries*, Baltimore: MD, 2003.

2000 *Mathematics Subject Classification.* Primary xxx, yyyy; Secondary xxxx, yyyy.
Key words and phrases. Dxxx gxxx, Axxx gxxx.

(author one) MERSIN UNIVERSITY, DEPARTMENT OF MATHEMATICS, MERSIN, TURKEY
Current address: Mersin University, Department of Mathematics, Mersin, Turkey
E-mail address, author one: semsieken@hotmail.com

(author two) İNÖNÜ UNIVERSITY, DEPARTMENT OF MATHEMATICS, MALATYA, TURKEY
E-mail address, author two: erol.kilic@nonu.edu.tr

LAST CHECK