A Cheeger-Gromov-Taylor Type Compactness Theorem for Sasaki Manifolds

Homare TADANO - Tokyo University of Science

Department of Mathematics, Faculty of Science, Tokyo University of Science, 1-3 Kagurazaka, Shinjuku-ku, Tokyo 162-8601

In this poster, after making a brief review of Sasaki geometry, we will give a new compactness theorem for complete Sasaki manifolds. This result can be regarded as a natural generalization of the compactness theorem due to J. Cheeger, M. Gromov, and M. Taylor [1] and improves Myers type theorems due to I. Hasegawa and M. Seino [2], and Y. Nitta [3].

References

[1] J. Cheeger, M. Gromov, and M. Taylor, Finite propagation speed, kernel estimates for functions of the Laplace operator, and the geometry of complete Riemannian manifolds, J. Differential Geom. 17 (1982), 15-53.

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[3] Y. Nitta, A diameter bound for Sasaki manifolds, Ann. Sc. Norm. Super. Pisa Cl. Sci. (5) Vol. XIII (2014), 207-224.