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Book of abstracts

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Warped product semi-slant submanifolds in locally conformal Kaehler manifolds

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On 1994, in [7], N. Papaghiuc introduced the notion of semi-slant submanifolds in a Hermitian manifold which is a generalization of CR- and slant-submanifolds ([1],[3],[4]). In particular, he considered this submanifold in Kaehlerian manifolds ([7]). Then, on 2007, V. A. Khan and M. A. Khan considered this submanifold in a nearly Kaehler manifold and obtained interesting results ([5]).

Recently, we considered semi-slant submanifolds in a locally conformal Kaehler manifold. We gave a necessary and sufficient conditions the two distributions (holomorphic and slant) be integrable. Moreover, we considered these submanifolds in a locally conformal Kaehler space form ([6]).

In this talk, we define 2-type warped product semi-slant submanifolds in an locally conformal Kaehler manifold which are the generalization of warped product CR-submanifolds ([2]) and consider some properties of these submanifolds. In particular, we mainly consider the first type warped product semi-slant submanifolds in an l.c.K.-space form.

Rerefences

[1] A. Bejancu, *Geomerty of CR-submanifolds,* D. Reidel Publishing Company, (1986).
[2] V. Bonanzinga and K. Matsumoto, *Warped product CR-submanifolds in locally conformal Kaehler manifolds,* Periodica Math. Hungarica, **48** (2-2) (2004), 207–221.
[3] B. Y. Chen, *CR-submanifolds of a Kaehler manifold I and II*, J. of Differential Geometry, **16**, 305–322 and 493–509(1981).
[4] B. Y. Chen, *Geometry of slant submanifolds*, Katholieke Univ. Leuven, (1990).
[5] V. A. Khan and M. A. Khan, *Semi-slant submanifolds of a nearly Kaehler manifold*, Turk J. Math., **31**(2007), 341–353.
[6] K. Matsumoto, *On semi-slant submanifolds of locally conformal Kähler space form*, to appear.
[7] N. Papaghiuc, *Semi-slant submanifolds of a Kaehlerian manifold*, An. St. Univ. Al. I. Cuza, Iasi, **40**, 55–61 (1994).