

Ülo Lumiste

Normally flat semiparallel submanifolds in space forms as immersed semisymmetric Riemannian manifolds

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Abstract: By means of the bundle of orthonormal frames adapted to the submanifold as in the title an explicit exposition is given for these submanifolds. Two theorems give a full description of the semisymmetric Riemannian manifolds which can be immersed as such submanifolds. A conjecture is verified for this case that among manifolds of conullity two only the planar type (in the sense of Kowalski) is possible.

Keywords: semiparallel submanifolds, flat normal connection, semisymmetric Riemannian manifolds, manifolds of conullity two

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