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Results in Mathematics



## Submanifolds in Koszul-Vinberg Geometry

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Abstract. A Koszul-Vinberg manifold is a manifold M endowed with a pair  $(\nabla, h)$  where  $\nabla$  is a flat connection and h is a symmetric bivector field satisfying a generalized Codazzi equation. The geometry of such manifolds could be seen as a type of bridge between Poisson geometry and pseudo-Riemannian geometry, as has been highlighted in our previous article [Contravariant Pseudo-Hessian manifolds and their associated Poisson structures. Differential Geometry and its Applications (2020)]. Our objective here will be to pursue our study by focusing in this setting on submanifolds by taking into account some developments in the theory of Poisson submanifolds.

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