Some Applications of Vrănceanu's Metric

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September 20, 2004

Abstract - We give some applications of Vranceanu's metric: a characterization of the hypersurfaces locally isometric with the sphere and the lower bounds for the eigenvalues of the so called twisted Dirac operator for a compact, spin manifold isometrically immersed in the Euclidean space. In particular, we compute this estimation for the sphere S^n isometrically immersed in the Euclidean space E^{n+1}.
Key words and phrases : Vrănceanu metric, Dirac operator, spin manifolds
Mathematics Subject Classification (2000) **:** 53B30

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