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Variationality of geodesic circles in two dimensions. (English summary)

Differential geometry and its applications, 635–642, *World Sci. Publ., Hackensack, NJ*, 2008.

The variational differential equations for geodesic circles in two dimensions are derived in the context of covariant Riemannian geometry. These geodesic curves are characterized by the fact that the Frenet curvature remains constant along them, and they are described by a system of third-order ordinary differential equations. The Lagrange derivative is treated in this framework and the influence of the curvature tensor on it is investigated. This leads in particular to a notion of quasiclassical spin in the pseudo-Riemannian case.

{For the entire collection see [MR2463742 \(2009h:53001\)](#)}

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