

THE GENERALIZED RADIAL CURVATURE OF PLANE CURVES

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Dedicated to the memory of Academician Radu Miron

ABSTRACT. We introduce and study a new curvature function for plane curves inspired by the weighted mean curvature of M. Gromov. We call it *generalized radial* being the difference between the usual curvature and the inner product of the normal vector field and the gradient of a radial smooth functions. But, since the problem of vanishing of this curvature involves complicated expressions, we computed it for several examples.

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