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On Affine Hypersurfaces with Constant Sectional Curvature

An interesting topic in Affine Geometry is to classify hypersurfaces with constant sectional curvature. Most of the results refer to hypersurfaces which are, at the same time, locally strongly convex: affine hyperspheres, for example, are classified by L. Vrancken, A. M. Li, U. Simon, Affine spheres with constant sectional curvature, Math. Z. 206 (1991), 651-658; those which are quasiumbilical are classified by L. Vrancken, Affine hypersurfaces with constant affine sectional curvature, Geometry and Topology of Submanifolds, IV, World Scientific, Singapore, (1992), 17-29. We ourselves consider here decomposable hypersurfaces, i. e. translation hypersurfaces with plane translation curves, and announce the classification of those with constant sectional curvature, without any requirement of convexity. Other related results shall also be exposed.