

[Leichtweiss, Kurt](#)

**On a problem of W. J. Firey in connection with the characterization of spheres.** (English)

[Zbl 0829.53053](#)

[Math. Pannonica](#) 6, No. 1, 67-75 (1995).

Relations between Euclidean curvature functions and the support function on hyperovaloids have been studied for decades, in particular certain monotone relations characterizing spheres. The author studies a new relation and uses methods from evolution theory for his proof. With these methods the author gives an interesting new proof of the Theorem of Blaschke and Deicke, using Tzitzeica's original (Euclidean) definition for proper affine spheres.

Reviewer: [U.Simon \(Berlin\)](#)

**MSC:**

[53C45](#) Global surface theory (convex surfaces à la A. D. Aleksandrov)

[53A07](#) Higher-dimensional and  $n$ -codimensional surfaces in Euclidean and related  $n$ -spaces

[53A15](#) Affine differential geometry

Cited in **1** Document

**Keywords:**

[characterization of ellipsoids](#); [Euclidean support function](#)

**Full Text:** [EuDML](#)