

## Werk

**Label:** Table of literature references

**Jahr:** 1978

**PURL:** [https://resolver.sub.uni-goettingen.de/purl?31311157X\\_0103|log108](https://resolver.sub.uni-goettingen.de/purl?31311157X_0103|log108)

## Kontakt/Contact

[Digizeitschriften e.V.](#)  
SUB Göttingen  
Platz der Göttinger Sieben 1  
37073 Göttingen

✉ [info@digizeitschriften.de](mailto:info@digizeitschriften.de)

where  $W$  is the function introduced by (25). Thus we get again the relation (26) and, according to the condition (iii),  $M$  is a part of a sphere in  $E^4$  by virtue of the maximum principle.

Again we can formulate

**Corollary 2.** *Let  $M$  be a surface in  $E^4$  satisfying the assumptions (i), (ii), (iv) of Theorem 4. Let*

(iii)  $\xi_{11} - \xi_{22} + S(\xi_{12} - \xi_{21}) = 0$  on  $M$ ,  $S : M \rightarrow \mathcal{R}$  being a function such that  $|S| \leq 4\sqrt{2} - 5$  on  $M$ .

*Then  $M$  is a part of a 2-dimensional sphere in  $E^4$ .*

We have got trivial consequences of Theorem 4 and Corollary 2 for  $S = 0$  on  $M$ .

#### References

- [1] *A. Švec*: Contributions to the global differential geometry of surfaces. Rozpravy ČSAV, 87, 1, 1977, 1–94.
- [2] *D. A. Hoffman*: Surfaces in constant curvature manifolds with parallel mean curvature vector field. Bull. Am. Math. Soc., 78, 1972, 247–250.

*Author's address*: 602 00 Brno, Gorkého 13 (Strojní fakulta VUT).