

ГОДИШНИК НА СОФИЙСКИЯ УНИВЕРСИТЕТ „СВ. КЛИМЕНТ ОХРИДСКИ“

ФАКУЛТЕТ ПО МАТЕМАТИКА И ИНФОРМАТИКА

Том 97

ANNUAIRE DE L'UNIVERSITE DE SOFIA „ST. KLIMENT OHRIDSKI“

FACULTE DE MATHEMATIQUES ET INFORMATIQUE

Tome 97

ON INFINITESIMAL RIGIDITY OF HYPERSURFACES ¹
IN EUCLIDEAN SPACE

IVANKA IVANOVA-KARATOPRAKLIEVA

The infinitesimal rigidity of hypersurfaces in \mathbb{R}^{n+1} , $n \geq 3$, is considered. In section 1 we remind some definitions in the theory of the infinitesimal bendings (inf. b.). In section 2 we discuss the results in the papers [5 - 9]. In section 3 we consider our main result in the paper [10] and we give some geometric interpretations of the investigations in [10]. Finally we consider an example.

Keywords: hypersurfaces, Euclidian space, infinitesimal rigidity

2000 MSC: 53C24

Received September 15, 2004

Faculty of Mathematics and Informatics
“St. Kl. Ohridski” University of Sofia
5, J. Bourchier blvd., 1164 Sofia
BULGARIA
E-mail: karatopraklieva@fmi.uni-sofia.bg

¹The work is supported by the fond “Scientific Research” of the Sofia University under contracts 586/2002 and 118/2004.