Year: 2007 | **Vol.: 71** | **Fasc.: 3-4**

Title: A stability property of the octahedron and the icosahedron

Author(s): Károly Böröczky, Károly Böröczky and Jr.

According to a recent result, for $r = \sqrt{3}$ or $r = \sqrt{15 - 6\sqrt{5}}$, the convex body of minimal volume or of minimal surface area in $\mathbb{E}^3$ that contains a unit ball, and the extreme points are of distance at least r from the centre of the unit ball is the regular octahedron and icosahedron, respectively. In this paper we prove corresponding stability results.

Address:
Károly Böröczky
Department of Geometry
Roland Eötvös University
Pázmány Péter sétány 1/C
H-1117, Budapest
Hungary
E-mail: boroczky@cs.elte.hu

Address:
Károly Böröczky, Jr.
Alfréd Rényi Institute of Mathematics
P.O. Box 127
H-1364, Budapest
Hungary
and
Department of Geometry
Roland Eötvös University
Pázmány Péter sétány 1/C
H-1117, Budapest
Hungary