

Year: 2012

Vol.: 81

Fasc.: 1-2

Title: Acute triangulations of double planar convex bodies

Author(s): Liping Yuan and Tudor Zamfirescu

A (2-dimensional) *double convex body* $2K$ is a surface homeomorphic to the sphere consisting of two planar isometric compact convex bodies, K and K' , with boundaries glued in the obvious way. In this note we prove that, if K admits two perpendicular axes of symmetry and $\text{bd}K$ satisfies a certain curvature condition, then $2K$ admits an acute triangulation of size 72. In particular, each double ellipse admits such a triangulation.

Address:

Liping Yuan
College of Mathematics, and Information Science, Hebei Normal University
050016 Shijiazhuang, China

Address:

Tudor Zamfirescu
Department of Mathematics, Dortmund University, of Technology
44221 Dortmund, Germany;
Mathematical Institute, Roumanian Academy
Bucharest, Romania;
“Abdus Salam” School, of Mathematical Sciences, Gc University
Lahore, Pakistan