



Mathematics > Combinatorics

Inscribing a regular octahedron into polytopes

Arseniy Akopyan, Roman Karasev

(Submitted on 22 Jul 2011 (v1), last revised 2 Oct 2012 (this version, v3))

We prove that any simple polytope (and some non-simple polytopes) in \mathbb{R}^3 admits an inscribed regular octahedron.

Subjects: **Combinatorics (math.CO)**; Metric Geometry (math.MG)

MSC classes: 52B10

Cite as: **arXiv:1107.4428 [math.CO]**

(or **arXiv:1107.4428v3 [math.CO]** for this version)

Submission history

From: Arseniy Akopyan [[view email](#)]

[v1] Fri, 22 Jul 2011 06:44:29 GMT (335kb)

[v2] Mon, 21 Nov 2011 09:59:38 GMT (335kb)

[v3] Tue, 2 Oct 2012 04:46:09 GMT (337kb)

Which authors of this paper are endorsers?

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF](#)
- [PostScript](#)
- [Other formats](#)

Current browse context:

math.CO

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[math](#)

[math.MG](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

