CORRECTION



# Correction to: Steiner symmetrization (n - 1) times is sufficient to transform an ellipsoid to a ball in $\mathbb{R}^n$

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Published online: 21 September 2020 © Fondation Carl-Herz and Springer Nature Switzerland AG 2020

#### Abstract

In this note we clarify the relation between the content of our paper [4] and the references.

### Résumé

Dans cette note nous clarifions les relations entre notre papier [4] et les références bibliographiques.

## Correction to: Annales mathématiques du Québec https://doi.org/10.1007/s40316-020-00140-8

The purpose of this note is to clarify the relation between the content of our paper [4] and the results present in the literature. As we learned after [4] has been published electronically, the main result in our paper has already appeared in Lemma 2 in [1] as well as, in a slightly different form, in Lemma 2.6 in [3] and also in a Remark following Lemma 6.3 in [2].

There are two steps in proving that (n - 1) Steiner symmetrizations can transform an ellipsoid to a ball. The first one is to show that a Steiner symmetrization transforms an ellipsoid into an ellipsoid. We prove this by making use of the classical Blaschke–Santaló inequality, and this argument does not appear in the references. The second step is to apply successive symmetrizations to end up with a ball. We first show the existence of the desired directions and then give an explicit algorithm for this second part. The second step was outlined in [1].

We thank Professor Burchard who, after the publication of [4], drew our attention to the relevant literature.

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The original article can be found online at https://doi.org/10.1007/s40316-020-00140-8.

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