FAIR AVERAGES

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Abstract

Several quantitative judgements are affected by unreliability, such as the referees being inexpert, or under the influence of exogenous factors. For instance, they might in some way be involved in the outcome of their own evaluations. Moreover, such distortions may be considerably increased through collusion between judges sharing common interests. There are many fields in which all the above may occur: Economics (e.g., estimate, or project evaluation), Finance (e.g., company quotation), Insurance (e.g., customized insurance policies), Arts (e.g., music competitions), artistic sports (such as rhythmic gymnastics, figure skating, synchronized swimming and diving), and so on.

In order to avoid taking bad data into account in the synthesis of collective valuations, classical methods give little or no weight to the tails of distributions. This creates problems in the case of asymmetries, because good data may be undervalued while bad data may be overvalued.

Some methods have been developed as a solution to such cases: For instance, the Coherent Majority Average (Gambarelli, 2008) considers only those scores that are, in majority, close to each other, while the Anti-collusion Average (Gambarelli and Uristani, 2010) solves problems where valuations are supplied by sub-committees whose results must be synthesized in terms of general averages. The latter average was applied to sports regulations by Gambarelli, Iaquinta and Piazza in (2012).
In this talk these averages are described and discussed in function of further possible applications.

**Short references**

