Year: 2017 | Vol.: 91 | Fasc.: 1-2

Title: Joining means

Author(s): Justyna Jarczyk and Witold Jarczyk

Modifying and generalizing some ideas from [1], we come to the notion of a marginal joint of two arbitrary means given on adjacent intervals. The construction of the joints makes use of the notion of a set-valued joiner. Also, the converse is proved: any mean can be obtained as a marginal joint of its two restrictions, produced with the use of a so-called reconstructing joiner having the smallest values in a sense. We conclude the paper by answering the question when the reconstructing joiner of the mean is a single-valued function.

Address:

Justyna Jarczyk Faculty of Mathematics, **Computer Science** and Econometrics University of Zielona Góra Szafrana 4a PL-65-516 Zielona Góra Poland Address: Witold Jarczyk Institute of Mathematics and Informatics John Paul II Catholic University of Lublin Konstantynów 1h PL-20-708 Lublin Poland and Faculty of Mathematics, Computer Science and Econometrics University of Zielona Góra Szafrana 4a PL-65-516 Zielona Góra Poland