

## RELATIONSHIP BETWEEN THE CONFLICT AND DECREASING OF IGNORANCE FROM COMBINATION EVIDENCE

Lepskiy A.E.

Higher School of Economics, Moscow, Russia

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*Received 30.07.2013, revised 18.09.2013.*

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The index of decreasing of ignorance after applying of combination rules is introduced and studied in the work within the frame of Dempster-Shafer theory. This index is analysed for some special sets (bodies) of evidence. It is shown that a strong correlation between bodies of evidence is a sufficient condition to decrease of ignorance after applying of combination rules. In addition, measure of conflict between the evidence introduced by axiomatically. A general view of a bilinear measure of conflict found. The upper and lower bounds dependence of the index decreasing of ignorance from the value of measures of the conflict after applying Dempster combination rule found.

**Keywords:** Dempster-Shafer theory, combination rules, imprecision index, conflict measure.

*Nechetkie sistemy i myagkie vychisleniya [Fuzzy Systems and Soft Computing], 2013, vol. 8, issue 2, pp. 65–82.*

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### Bibliographic citation

Lepskiy A.E. Relationship between the conflict and decreasing of ignorance from combination evidence. *Nechetkie sistemy i myagkie vychisleniya* [Fuzzy Systems and Soft Computing], 2013, vol. 8, issue 2, pp. 65–82. (in Russian)