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# ON MEANS OF BELIEF FUNCTIONS

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**Abstract**

When size of the sample increases towards the size of population, the results obtained by analizing sample units becomes more and more close, accurate, appropriate and reliable to the results obtained by analizing population units. Therefore if we increase the number of experts then results obtained by summarizing all experts' results, are more reliable, accurate and appropriate. But there are some limitations to number of experts as we have to minimize time, money, calulations, human resources and many other resources, in getting final conclusions. Therefore, there is agood practice to consult a feasible number of experts, who withdraw conclusions with help of valid rules, laws and axioms. As several combination rules are developed for combining basic belief functions given by several experts for subsets of frame of discernment. But these combination rules are complcated and time consuming. In this paper, several means like arithmatic, Geometric, Harmonic, Quadratic, Holder, Hemler and Stolarski means of belief functions, plausibility functions and commonality functions, are considered and their properties are presented with a illustrated example.

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Key Words : *Belief function, Plausibility function, Commonality function, Frame of discernment.*

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