



Advances and Applications of DSmT for Information Fusion

Florentin SMARANDACHE

University of New Mexico, Gallup Campus, USA

The Dezert-Smarandache Theory (DSmT) of plausible and paradoxical reasoning is a natural extension of the classical Dempster-Shafer Theory (DST) but includes fundamental differences with the DST. DSmT allows to formally combine any types of independent sources of information represented in term of belief functions, but is mainly focused on the fusion of uncertain, highly conflicting and imprecise quantitative or qualitative sources of evidence. DSmT is able to solve complex, static or dynamic fusion problems beyond the limits of the DST framework, specially when conflicts between sources become large and when the refinement of the frame of the problem under consideration becomes inaccessible because of vague, relative and imprecise nature of elements of it.

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