

ON THE UNIQUENESS THEOREM FOR PSEUDO-ADDITIONAL ENTROPIES

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ABSTRACT

In my Mini-Symposium presentation I will briefly discuss the idea that the Tsallis-type (q-additive) entropic chain rule allows for a large class of entropic functionals. I will further show that the ensuing entropy solution (e.g., Tsallis entropy) is uniquely determined only when one fixes the prescription for handling conditional entropies. I will illustrate my point with two examples; i) hybrid entropy of Jizba-Arimitsu^[1,2,3] and ii) generalized entropy of Ilić-Stanković^[4]. Finally, I will highlight the logical connection with Landsberg's classification of thermodynamical systems with non extensive entropies^[5,6].

REFERENCES

- [1] P.Jizba and J.Korbel, *Physica A* 468 (2017) 238-243
- [2] P.Jizba and J.Korbel, *Physica A* 444 (2016) 808-827.
- [3] P.Jizba and T. Arimitsu, *Physica A* 365 (2006) 76-84
- [4] M. Ilić and P. Stanković, *Physica A* 411 (2014) 138
- [5] P.T.Landsberg, *Braz. J. Phys.* 29 (1999) 46
- [6] P.T.Landsberg and D.Tranah, *Collective Phenomena* 3 (1980) 73