

Modified Entropic Force & Modified Newtonian Dynamics (MOND): Implications for DE & DM

Gennady Y. Chitov

Department of Physics, Laurentian University

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Papers To Discuss:

1. C. Gao, "Modified Entropic Force," Phys. Rev. D **81**, 087306 (2010) [arXiv:1001.4585 [hep-th]].
2. X. Li and Z. Chang, "Debye entropic force and modified Newtonian dynamics," arXiv:1005.1169 [hep-th].
3. H. Wei, "Cosmological Constraints on the Modified Entropic Force Model," arXiv:1005.1445 [gr-qc].
4. C. M. Ho, D. Minic and Y. J. Ng, "MONDian Dark Matter," arXiv:1005.3537 [hep-th].

Related References:

(i) Gravity as Entropic Force:

1. T. Padmanabhan, "Equipartition of energy in the horizon degrees of freedom and the emergence of gravity," Mod. Phys. Lett. A **25**, 1129 (2010) [arXiv:0912.3165 [gr-qc]].
2. E. P. Verlinde, "On the Origin of Gravity and the Laws of Newton," arXiv:1001.0785 [hep-th].

(ii) MOND:

- 1 a,b. J. D. Bekenstein, "Alternatives to dark matter: Modified gravity as an alternative to dark matter," arXiv:1001.3876 [astro-ph.CO];
"Relativistic gravitation theory for the MOND paradigm," Phys. Rev. D **70**, 083509 (2004) [Erratum-ibid. D **71**, 069901 (2005)] [arXiv:astro-ph/0403694].
2. M. Milgrom, "The MOND paradigm," arXiv:0801.3133 [astro-ph].