

Abstract Submitted  
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**Dark Matter, Dark Energy and General Relativity** JACQUES LEIBOVITZ, retired — From an earlier model of DM, we derived: An equation of state for DM. An equation governing the coupled distributions of baryonic and dark matters; galactic flat rotation curves; the Tully-Fisher relation; Milgrom's MOND relation; and a mechanism for the accelerated expansion of the Universe (J of Modern Physics, Dec. 2011). In the present paper, we add the derivation of: a mechanism for the formation of a super massive black hole at the center of every large galaxy; a rationale for the finding (by Oort) that the Sun mass on the Solar Neighborhood scale is twice that found on the Solar System scale. Results are discussed; we conclude that general relativity may neither be applied to DM nor to the description of the Universe and its evolution. The correct description must be based not on General Relativity but on Newton's Gravitation, on the proposed model of DM, and on Einstein's relativity of 1905.

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