Abstract Submitted
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Implications of Planck Scale Statistics SHANTILAL GORADIA, Gravity Research Institute, Inc. — Numerous analyses suggest that if modified Newtonian dynamics known as MOND turns out to be correct, the need for Dark Matter is obviated. It is also likely that it impacts the issue of Dark Energy to explain the accelerating expansion of the universe. In order to unify GR with QM we take a completely different approach. We use Planck scale statistics (PST) to describe all distances in [1]. We take similar approach to modify Newtonian gravity in [2] to arrive at what may be called probabilistic Newtonian dynamics (PROND). PROND links strong coupling with gravity, as does MOND. It does so naturally without having to renormalize. PST links fine structure constant with the age of the universe. If PST can link the size of the universe to fine structure constant, PST may also accomplish what MOND does on the issue of Dark Matter. At least, we show such additional abilities of PST to justify its use to probe the unity of everything. [1] http://arXiv.org/pdf/physics/0210040v3, [2] http://arXiv.org/pdf/physics/0210040v4.

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