Abstract Submitted
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Expanding Gravity SOL AISENBERG, International Technology Group — Newton's gravitational constant Gn and Laws of Gravity are based upon observations in our solar system. Mysteries appear when they are used far outside our solar system Apparently, Newton's gravitational constant can not be applied at large distances. Dark matter was needed to explain the observed flat rotational velocity curves of spiral galaxies (Rubin), and of groups of remote galaxies (Zwicky). Our expansion of Newton's gravitational constant Gn as a power series in distance r, is sufficient to explain these observations without using dark matter. This is different from the MOND theory of Milgrom involving acceleration. Also, our Expanded Gravitational Constant (EGC) can show the correct use of the red shift. In addition to the Doppler contribution, there are three other contributions and these depend only upon gravity. Thus, velocity observations only based on the red shift can not be used to support the concept of the expanding universe, the accelerating expansion, or dark energy. Our expanded gravity constant can predict and explain Olbers' paradox (dark sky), and the temperature of the CMB (cosmic microwave background). Thus, CMB may not support the big bang and inflation.

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