Abstract Submitted for the DNP06 Meeting of The American Physical Society

Big Numbers Hypothesis SHANTILAL GORADIA, Gravity Research Institute, Inc. — The dark matter predicted by the quantum field theory has a value of force 10^{120} greater than indicated by observations. The product of 10^{80} nucleons and the surface area 10^{40} of each nucleon is 10^{120} . The surface area of the universe taken as a single particle is 10^{120} . The coupling constant between inter universes calculable, as square of D (Hubble time) as done in [1] is 10^{120} . The ratio of Hubble time to nucleon diameter is the same as the ratio of nucleon surface area to Planck length, both equal to 10^{40} , raising a question: Are they both inflating at the same time or is it the Planck length that is shrinking since the big bang, and impacting evolution? The universe looks inflationary looking inside out. We are taking Doppler effect as scale invariant, while the fundamental constants of nature are changing. The 2002 publication of the English translation of Einstein's 1919 paper by Hawking reveals clearly that he retracted the 1917 introduction of the cosmological constant. He might have informally uttered to Gamow about his blunder made in 1917 without clarifying his correction in 1919. His 1919 paper and his 1935 paper, both connect particles to normal spacetime implying he held the same view the rest of his life. I connect them too in physics/0210040 and will present more details. [1] S. G. Goradia gr-qc/0507130 (Indian Journal of Theoretical *Physics* **52** 143 2004)

> Shantilal Goradia Gravity Research Institute, Inc.

Date submitted: 01 Jul 2006

Electronic form version 1.4