The Universe Without Darkness

"Who cares about the relative position of the Earth, the Sun, and the center of the Milky Way?" Another friend of mine

Schwarzschild's solution

$$\mathbb{R}_{00} - \frac{1}{2} g_{00}\mathbb{R} = \frac{1}{r}\frac{V'}{V^2} + \frac{1}{r^2}\left(1 - \frac{1}{V}\right) = \frac{8\pi G}{c^2} T_{00} = 0$$

$$ds^2 = \left(1 - \frac{2GM}{c^2 r}\right) c^2 dt^2 - \frac{dr^2}{1 - \frac{2GM}{c^2 r}} - r^2 d\theta^2 - r^2 \sin^2\theta d\phi^2$$

Suggested Metric

$$\mathbb{R}_{00} - \frac{1}{2} g_{00}\mathbb{R} = \frac{1}{r}\frac{V'}{V^2} + \frac{1}{r^2}\left(1 - \frac{1}{V}\right) = \frac{A_{(r)}}{r^4}$$

$$V_{(r)} = 1 + \frac{2GM}{C^2 r}, \quad if \quad A_{(r)} = \frac{4G^2M^2}{C^4\left(1 + \frac{2GM}{C^2 r}\right)^2}$$

$$ds^2_{r \geq R} = \frac{C^2 dt^2}{\left(1 + \frac{2GM}{C^2 r}\right)} - \left(1 + \frac{2GM}{C^2 r}\right) dr^2 - r^2 d\theta^2 - r^2 \sin^2\theta d\phi^2.$$

The Schwarzschild's metric can be seen as an approximation of the suggested metric for weak gravitational fields.

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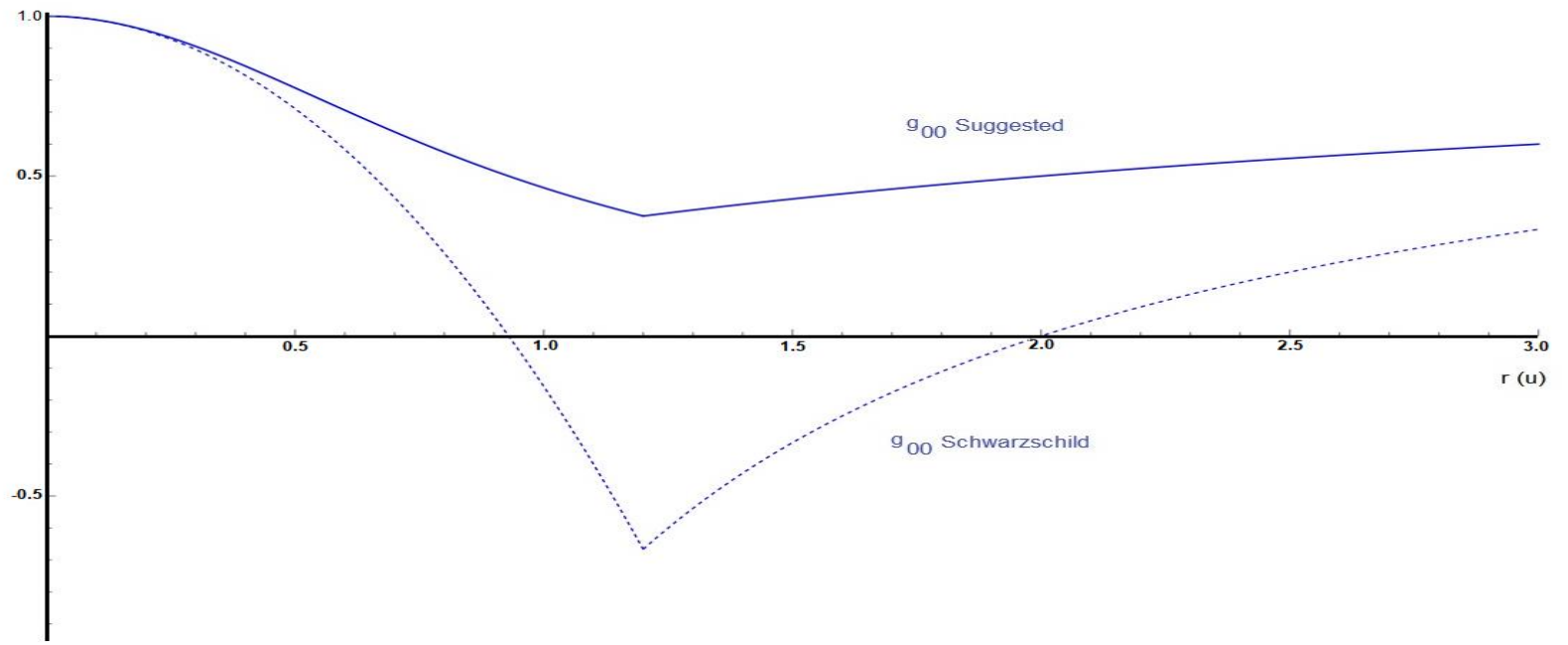
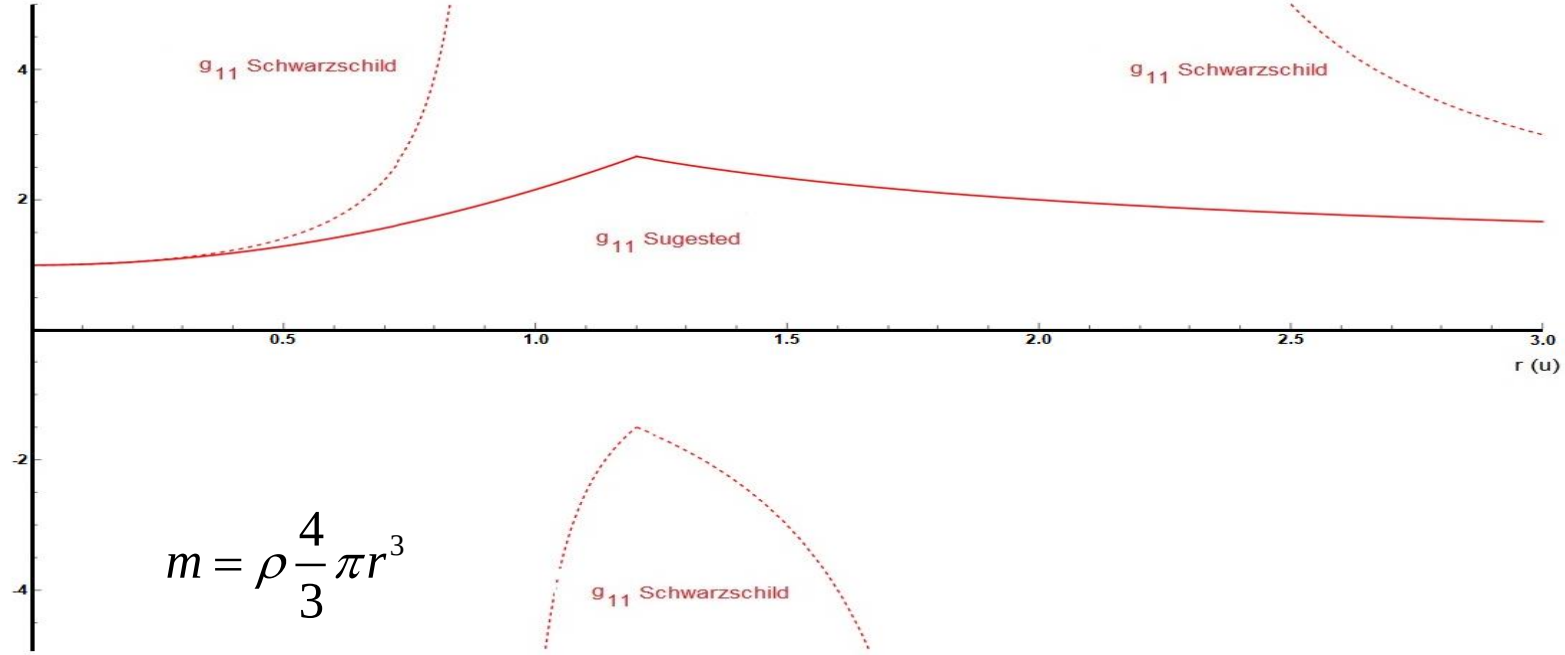
Comparative Metrics

$$m_{r \le R} = \rho_{ctt} \frac{4}{3} \pi r^3$$

$$R = 1.2\, u$$

$$\frac{2GM}{c^2} = 2$$





$$m = \rho \frac{4}{3} \pi r^3$$

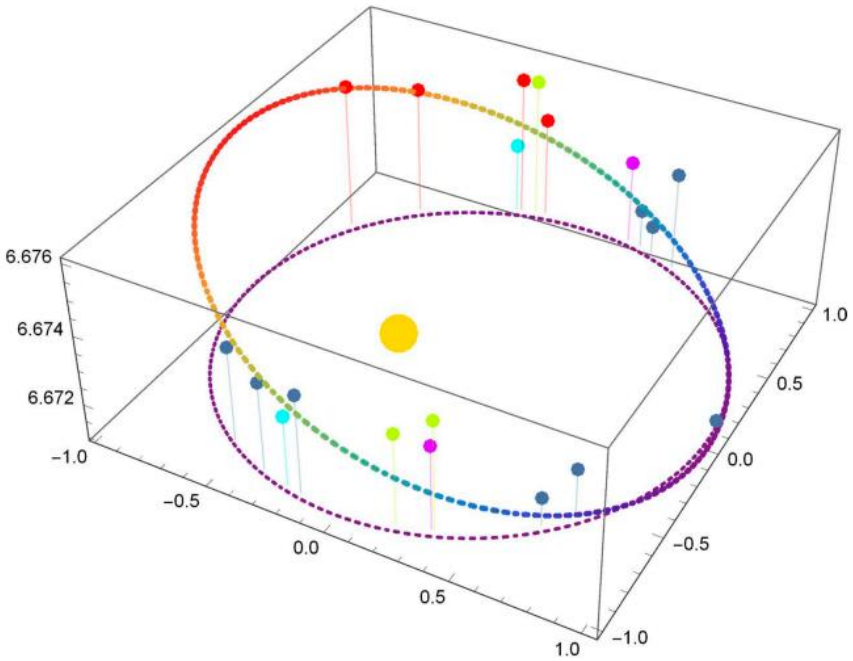
Almost Constant Star Velocities outside of the Milky Way bulge can be explained if …

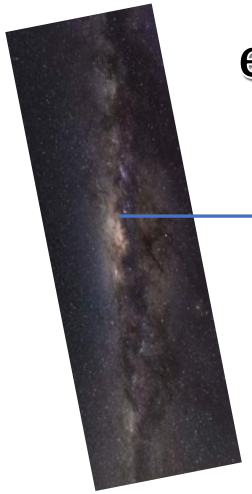
… If the gravitational gas irradiates energy to the region r > 0.2 kpc

$$\rho_{r \geq 0.2\,kpc} \sim \frac{\rho_0}{r^2} \Rightarrow \frac{2GM}{C^2 r} \sim \text{constant}$$

$$\text{because } M_{r \geq 0.2\,kpc} \sim 4\pi\rho_0 r$$

Big G measurements and the Interferential Model

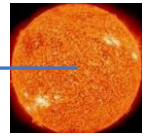




This configuration is repeated every year for millions of years

December 23

$r_{\odot}$



June 16

Spatial Repetition: $\lambda = 300,000\ km$ (frequency meassured using the Cavendish's balance: f $\approx$ 1 Hz)

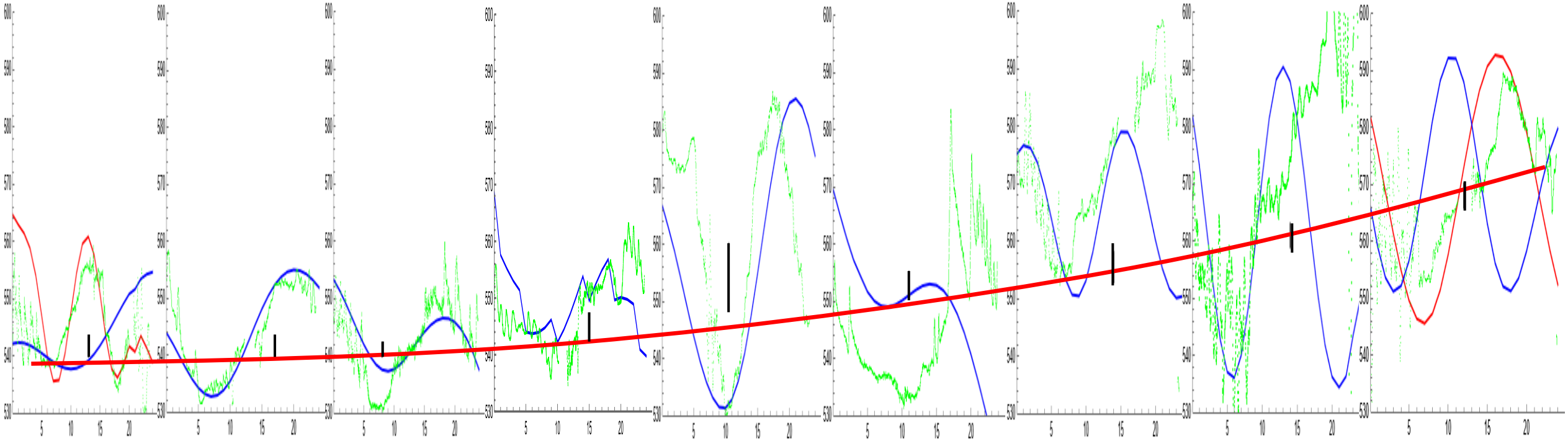
$\varphi_{Way} = \frac{2\pi}{\lambda} r_{Way}$ (taking r = 0 at the point were the gravitational signal coming fron the center of the MW touch the Sun)

$\varphi_{Sun} = \begin{pmatrix} 1 \\ 0 \end{pmatrix} \pi + \frac{2\pi}{\lambda} r_{Sun}$ (1 if the gravitational signal is reflected by the Sun, 0 if it is refracted)

$\varphi_{Moon} = \begin{pmatrix} 1 \\ 0 \end{pmatrix} \pi + \frac{2\pi}{\lambda} \left\{ r_{Moon} + R_{Earth} \operatorname{Sin}\left[\frac{2\pi}{24} \left(t_{Moon} + \varphi_0 \right) \right] \right\}$ (1 when reflection on the Moon, 0 if it is refracted)

$$I = I_{0(t)} + I_G \left\{ \left[\operatorname{Cos}\left(\varphi_{Way}\right) + \operatorname{Cos}\left(\varphi_{Sun}\right) + \operatorname{Cos}\left(\varphi_{Moon}\right) \right]^2 + \left[\operatorname{Sin}\left(\varphi_{Way}\right) + \operatorname{Sin}\left(\varphi_{Sun}\right) + \operatorname{Sin}\left(\varphi_{Moon}\right) \right]^2 \right\}$$

Black bars: NIST of USA correlated G values from 10/07/2021 to 04/05/2022.
Green points: Experimental determination of the gravitational bias using a double string type-Cavendish's balance. Blue and red curves: Theoretical intensity according the equation on the previous slide.



Relative position of graphs above from lower green values to bigger green values.
The good correlation of the variation of three very demanding numbers, been them the fine determination of G values, every five seconds control of the gravitational biases, and an interferential model that combine big numbers, is pointing to the existence of a ***new*** gravitational scenario in favor of the General Theory of Relative of A. Einstein.