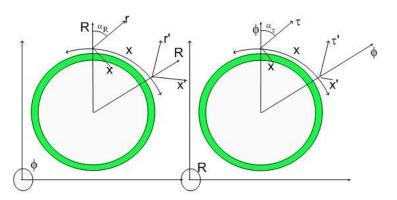
## Hypergeometrical Universe Theory Summary

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The Hypergeometrical Universe Theory (HU) is a purely geometrical theory that proposes many paradigm changes:

1. The Universe is a lightspeed expanding thin hyperspherical shockwave (Fabric of Space or FS) which started with a 4D Big Bang 15.82 billion year ago. The age of the Universe was

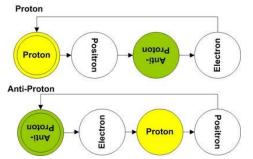


derived from the Pioneer Anomaly Data. The right panel right panel below shows a local metric that is Minkowskian. This topology eliminates the need for Inflation Theory since it explains the Microwave Cosmic Background in a straightforward manner.

2. HU derives Grand Unification Laws from a Fabric of Space (FS) Stress-Strain paradigm to eliminate the need for Mass, Charge and other non-geometrical constructs. In doing so, it allows for the derivation from first principles of all non-geometrical Cosmological Constants (G,  $\mu_0, \varepsilon_0$ ). It also allows for the derivation of c as being the limiting speed in this Universe. The resulting Grand Unification Laws are shown below:

$$\bar{F}_{1} = Gm_{1}m_{2}\frac{\hat{R}}{R^{2}} \left| \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c}\right]}{\left[1 + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\bar{V}_{2}}{c^{2}}\right]^{2}} \right| \bar{F}_{1} = \frac{C_{1}C_{2}}{4\pi\varepsilon_{0}} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c}\right]}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c}\right]}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c}\right]}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c}\right]}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{\left[1 - \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}}{\left[1 + \frac{1}{c} + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{1}{c} \frac{\bar{V}_{1}\hat{R}}{\left[1 + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{2}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{V}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{1}{c} \frac{\bar{V}_{1}\hat{R}}{\left[1 + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{R}}{c} + \frac{\bar{V}_{1}\hat{R}}{c}\right]^{2}} \frac{\hat{R}}{R^{2}} \bar{F}_{1} = \frac{\mu_{0}c^{2}c_{1}c_{2}}{4\pi} \frac{1}{c} \frac{\bar{V}_{1}\hat{R}}{c} + \frac{$$

3. HU introduces the concept of Fundamental Dilator (FD) to replace particle. The FD is



coherence between deformational states of the 4D spatial manifold. As it travels within the FS, at the speed light along R (direction perpendicular to our XYZ coordinates), FD spins maximizing its overlap with FS twice every spin. The four phases of FD corresponds to the four fundamental particles (proton, electron, positron, and antiproton). All hyperons and isotopes have a simple representation in

terms of the four phases of the FD.

4. HU passes the standard tests for General Relativity (Precession of Mercury Perihelion, Gravitational Lensing) and provide the proper logic to move from Classical Mechanics into Quantum Mechanics by the Stroboscopic Universe paradigm brought about by the Fundamental Dilator.