Algebraic and geometric questions about a 6D physics

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The puzzling observation of a whirling plane of satellite galaxies around Centaurus A [5] opens to cosmological hypotheses alternative to the Λ-CDM model, such as the 6D spacetime proposed more than ten years ago ([1, 2, 3]) and reinforced by new data from the Hubble Space Telescope revealing that the universe is expanding faster than expected [6]. Assuming a three-dimensional time, the geometric and algebraic analysis of the temporal distortions around a structureless rotating sphere would lead to an elegant explanation of both the galaxy-scale planar alignment of orbiting bodies (radial time) and the Universe's increasing expansion rate (angular time). We mean that the effects attributed to two alleged *dark* entities (matter and energy) could find a unitary explanation within the germinal 3T theory [4] we wish to illustrate now.

Rerefences

[1] Enzo Bonacci. *General Relativity Extension*. Turin : Carta e Penna, 2006.
[2] Enzo Bonacci. *Extension of Einstein's Relativity*, volume 42 of *Physical Sciences*. Rome : Aracne Editrice, 2007.
[3] Enzo Bonacci. *Beyond Relativity*, volume 43 of *Physical Sciences*. Rome : Aracne Editrice, 2007.
[4] Enzo Bonacci. Hypothetical six-dimensional reference frames. *International Journal of Mathematical Sciences and Applications*, 5(2) : 447–455, 2015.
[5] Oliver Müller et al. A whirling plane of satellite galaxies around Centaurus A challenges cold dark matter cosmology. *Science*, 359(6375) : 534–537, 2018.
[6] Adam Guy Riess et al. New parallaxes of Galactic Cepheids from spatially scanning the Hubble Space Telescope: implications for the Hubble Constant. *The Astrophysical Journal*, accepted for publication.