

Detection of dark matter-baryon matter non-gravitational interaction

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Does the non-baryon 95% of the universe possess specific physical characteristics that can be compared to those of a gas or a fluid, and can it interact with ordinary matter in a direct way other than gravitational interaction? By using the Lorentz factor in Stokes' law as the apparent-viscosity coefficient of space, which is treated as a dark fluid with non-Newtonian and dilatant characteristics, it is shown that some well-known anomalies are resolved with precision, directly obtaining for instance both the exact value of the Pioneer anomaly (without resorting to simulations, as in the hitherto accepted solution, which has a large margin of error and is based on various uncertain data) and that of the precession of Mercury's perihelion, by deriving Einstein equation in a new way, based on space as a dark dilatant fluid. This specific type of dark fluid that emerges is also capable of explaining the spider-web structure of dark matter filaments in the universe and predicts their rotation.

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