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Dark-fluid constraints of shear-free universes

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We present the evolutionary constraints of shear-free cosmological solutions in the presence of a dark fluid. After describing the general evolution and constraint equations for *quasi-Newtonian* and *anti-Newtonian* spacetimes, we derive, at the level of linear perturbations, the conditions for the existence and consistent evolution of such spacetimes when they are endowed with the Chaplygin gas which mimics a unified description of dark matter and dark energy.

Apply to be considered for a student ; award (Yes / No)?

No

Level for award;(Hons, MSc, PhD, N/A)?

N/A

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