

## Contributed Talk

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**Title:** Dark-fluid constraints of shear-free universes

**Abstract:** 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.