

Dark Energy with a Little Help from its Friends

It has proven surprising difficult to obtain a microscopic understanding of Dark Energy within string theory. The two main paradigms, a landscape of de Sitter vacua or slow-roll quintessence (including axion quintessence), seem to require various fine-tunings and/or working at the boundaries of control, which has led to much fruitful debate. I will discuss alternative scenarios for Dark Energy motivated by string theory, in which interacting Dark Sectors – including Dark Radiation, Dark Matter or mutual-aid’ Dark Energy – can source a late-time, transitory accelerated expansion. These scenarios require no fine-tuning of initial conditions, no fine-tuning between potential parameters, no large-field displacements, have potentially observable consequences, and are consistent with recent string theoryswampland conjectures’.

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