Physics > General Physics

Notes on dark energy interacting with dark matter and unparticle in loop quantum cosmology

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(Submitted on 8 Jul 2011 (v1), last revised 29 Jul 2011 (this version, v2))

We investigate the behavior of dark energy interacting with dark matter and unparticle in the framework of loop quantum cosmology. In four toy models, we study the interaction between the cosmic components by choosing different coupling functions representing the interaction. We found that there are only two attractor solutions namely dark energy dominated and dark matter dominated Universe. The other two models are unstable, as they predict either a dark energy filled Universe or one completely devoid of it.

Comments:	9 pages, 10 figures. v2: Minor revisions, matches published version
Subjects:	**General Physics (physics.gen-ph)**; General Relativity and Quantum Cosmology (gr-qc)
Journal reference:	Eur.Phys.J.C71:1711,2011
DOI:	10.1140/epjc/s10052-011-1711-5
Cite as:	**arXiv:1107.1558 [physics.gen-ph]**
	(or **arXiv:1107.1558v2 [physics.gen-ph]** for this version)

Submission history

From: Davood Momeni Dr [view email]
[v1] Fri, 8 Jul 2011 05:13:57 GMT (334kb)
[v2] Fri, 29 Jul 2011 11:06:04 GMT (243kb)

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