



Library Indian Institute of Science Education and Research Mohali



DSpace@IISERMohali (/jspui/)

/ Publications of IISER Mohali (/jspui/handle/123456789/4)

/ Research Articles (/jspui/handle/123456789/9)

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/1650>

Title:	Reconstruction of dynamical dark energy potentials: Quintessence, tachyon and interacting models
Authors:	Rajvanshi, M.P. (/jspui/browse?type=author&value=Rajvanshi%2C+M.P.) Bagla, J.S. (/jspui/browse?type=author&value=Bagla%2C+J.S.)
Keywords:	Dark energy Quintessence Interacting models
Issue Date:	2019
Publisher:	Springer Link
Citation:	Journal of Astrophysics and Astronomy, 40(06).
Abstract:	Dynamical models for dark energy are an alternative to the cosmological constant. It is important to investigate properties of perturbations in these models and go beyond the smooth FRLW cosmology. This allows us to distinguish different dark energy models with the same expansion history. For this, one often needs the potential for a particular expansion history. We study how such potentials can be reconstructed by obtaining closed formulae for potential or reducing the problem to quadrature. We consider three classes of models here: tachyons, quintessence and interacting dark energy. We present results for the constant w and the CPL parametrization. The method given here can be generalized to any arbitrary form of $w(z)$.
URI:	https://link.springer.com/article/10.1007%2Fs12036-019-9613-2 (https://link.springer.com/article/10.1007%2Fs12036-019-9613-2) http://hdl.handle.net/123456789/1650 (http://hdl.handle.net/123456789/1650)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format
Need to add pdf.odt (/jspui/bitstream/123456789/1650/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text

[View/Open \(/jspui/bitstream/123456789/1650/1/Need%20to%20add%20pdf.odt\)](#)

[Show full item record \(/jspui/handle/123456789/1650?mode=full\)](#)

[Statistics \(/jspui/handle/123456789/1650/statistics\)](#)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.