

COMPTES RENDUS PHYSIQUE

Tome 13 (2012) – N° 6-7



Visible-light and X-Ray composite image of galaxy cluster 1E 0657-556.

Image Credit:

X-ray image: NASA/CXC/M.Markevitch et al.

Optical image: NASA/STScI; Magellan/U.Arizona/D.Clowe et al.

Lensing Map: NASA/STScI; ESO WFI; Magellan/U.Arizona/D.Clowe et al.

DOSSIER

Understanding the Dark Universe

Guest editors / Rédacteurs en chef invités : Philippe Brax, Celine Boehm

- Foreword
Philippe Brax, Celine Boehm 519
- Observational evidence of the accelerated expansion of the universe
Pierre Astier, Reynald Pain 521
- The phenomenological approach to modeling the dark energy
Martin Kunz 539
- Everything you always wanted to know about the cosmological constant problem (but were afraid to ask)
Jérôme Martin 566
- Galileons in the sky
Claudia de Rham 666
- Establishing homogeneity of the universe in the shadow of dark energy
Chris Clarkson 682
- Theories of particle dark matter
Tim M.P. Tait, Dan Hooper 719

Suite du sommaire page suivante

Sommaire (suite)

- Dark matter: The astrophysical case
Joseph Silk 724
- Direct detection of WIMPs
Eric Armengaud 730
- Dark matter indirect signatures
Julien Laval, Pierre Salati 740