



Contribution ID: 185

Type: Talk

Inhomogeneous conformally flat models of the universe

Monday 14 December 2015 15:24 (21 minutes)

I will discuss the benefits of the conformally flat inhomogeneous pressure models of the universe. Then, I will present the results of checking these models against supernovae data for off-centers observers and against other data (BAO, CMB) for the centrally-placed observers. I will also comment on the possible advantage of these models in view of the recently given Green and Wald conditions for backreaction to mimic dark energy.

1. A. Balcerzak, M.P. Dąbrowski, and T. Denkiewicz, Off-center observers versus supernovae in inhomogeneous pressure universes, *Astroph. Journ.* 792, 92-99 (2014).
2. A. Balcerzak, M.P. Dąbrowski, T. Denkiewicz, D. Polarski, D. Puy, A critical assessment of some inhomogeneous pressure Stephani models, *Phys. Rev. D*91, 083506 (2015).
3. A. Balcerzak, M.P. Dąbrowski - in progress.

Author: DABROWSKI, Mariusz (University of Szczecin)

Co-author: Dr BALCERZAK, Adam (University of Szczecin)

Presenter: DABROWSKI, Mariusz (University of Szczecin)

Session Classification: 02 - Exact solutions