

Seminarium Zakładu Fizyki Teoretycznej

Departament Badań Podstawowych
Narodowego Centrum Badań Jądrowych

16 maja 2018 r. (środa), godz.12:15
pawilon NCBJ, sala 22, Hoża 69

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" RELATIVISTIC COSMOLOGY AND BACK-REACTION CONJECTURE "

ABSTRACT:

Cosmological concordance model has been successful in explaining numerous observable phenomena at the price of introducing an 'exotic' sources of unknown origin - dark energy and dark matter. Conjecture lying at the basis of this model, namely the assumption that our Universe can be accurately described by spatially homogeneous and isotropic metric, remains one of the main subjects of sometimes heated debates between cosmologists and relativists. Postulated effects of density inhomogeneities on the large scale evolution of the Universe, the so-called back-reaction, divided the community into its enthusiasts, opponents and fence-sitters. The actual existence of back-reaction is however uncontroversial, it is its magnitude and physical meaning that is being currently disputed. In my talk I will present several theoretical aspects of relativistic modeling of the inhomogeneous Universe and summarize the current status of the 'back-reaction debate'

Serdecznie zapraszamy,

M. Kowal, W. Piechocki, L. Roszkowski, J. Skalski, L. Szymanowski