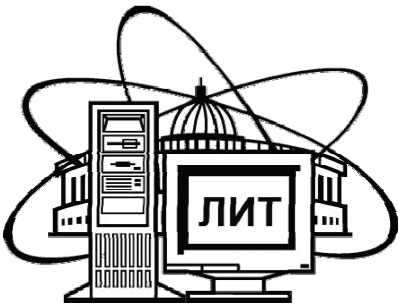

ЛАБОРАТОРИЯ ИНФОРМАЦИОННЫХ ТЕХНОЛОГИЙ

Четверг, 7 мая 2015 г. в 15.00

ком. 310

Plamen Fiziev
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Dark phenomena in the Universe give rise difficult numerical problems

I will give a very short review of the known dark phenomena in the Universe including latest results:
• “The dark energy” (accelerating expansion of Universe: Supernovae, CMB, Large-scale structure, Late-time integrated Sachs-Wolfe effect, Observational Hubble constant data) and
• “The dark matter” (in CMB, in the Universe as a whole, in galaxy clusters, galaxy rotation curves, in solar system, and in Earth experiments), as well as the present-days-status of the existing models of these phenomena.
A special attention will be paid to the numerical problems in the dark-scalar-field models of dark phenomena and especially in recent models of compact stars.
Numerical results obtained by high precision parallel calculations using Maple Grid will be presented and discussed in more detail.
A problem of utilizing two professional FORTRAN programs (COCAL and CAMB) will be presented in short.