

# Electrodynamics Problems of Astrophysics, Technical Status Report No. 4. Stanford University. Microwave Laboratory

Astrophysics - Science topic. Astrophysics is the branch of astronomy that deals with the physics of the universe, including the physical properties of celestial objects, as well as their interactions and behavior. Questions (172). Publications (684,680). We report on the search of astrophysical gamma rays with energies in the 100 TeV to several PeV range arriving in directional and temporal coincidence with public alerts from HAWC (TeV gamma rays) and IceCube (neutrinos above ~100 TeV). The observations have been performed with the Carpet-2 air-shower detector at the Baksan Neutrino Observatory, wo... No account? Sign up. Company. Based on the principle of permanent magnet electrodynamic suspension (PMEDS), a new concept maglev car was designed by using rotary magnetic wheels and a conductor plate. It has the advantages of being high-speed, low-noise, environmentally friendly, safe and efficient. The PMEDS car is designed to use a permanent magnet electrodynamic wheel (EDW) to achieve the integration of levitation force and driving force. A simplified electromagnetic force model of the EDW and a dynamics model of the PMEDS car were established to study the operating mode. It shows that the PMEDS car can achieve suspension when the rotational speed of the EDWs reaches a certain threshold and the critical speed of the EDWs is 600 rpm. This article is a list of notable unsolved problems in astronomy. Some of these unsolved problems in astronomy are theoretical, meaning that existing theories seem incapable of explaining a certain observed phenomenon or experimental result. The others are experimental, meaning that there is a difficulty in creating an experiment to test a proposed theory or investigate a phenomenon in greater detail. Some pertain to one-off events, unusual occurrences that have not repeated and whose causes therefore Carried out a description of the general principles of the numerical simulation of gas flows in close binary systems. An overview of the major modern numerical methods is given which are most frequently used for describing gas dynamics of astrophysical problems of this type. Attention is paid to the various problems encountered in solving such problems by means of numerical simulations. 3. Observational manifestations of the structural elements of the flow in close binary systems. We consider the currently used methods for identifying the various elements of the structure of the flow in close A. Danilenko "Graphic processor realization of the formal solution of the problem of radiation transfer in the neutron star atmosphere" (433 kB) Technical Physics 63, 476-481 (2018) [original in Russian: Zhurnal Tekhnicheskoy Fiziki 88, 492-497 (2018)]. A.V. Ivanchik, V.Yu. Yurchenko "Relic neutrinos: Antineutrinos of Primordial Nucleosynthesis" [arXiv:1809.03349] Phys. D.D. Ofengeim, D.G. Yakovlev "Cooling status of three neutron stars" J. Phys.: Conf. Ser. W. Rohringer, D. Fischer, F. Steiner, I.E. Mazets, J. Schmiedmayer, M. Trupke "Non-equilibrium scale invariance and shortcuts to adiabaticity in a one-dimensional Bose gas" Scientific Reports 5, 9820 [7 pp.] (2015). E B Ryspaeva, A.Yu. Kirichenko, Yu. Fiziko-Matematicheskiye Nauki, No.4, 79-87 (2012).