

GRAVITATION PROBLEMS IN A LITTLE-KNOWN  
N. ROSEN'S PAPER OF HIS KYIV PERIOD  
(1936–1938): TO THE ORIGINS OF FORMATION  
OF THE GRAVITATIONAL WAVE THEORY

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S u m m a r y

A little-known paper of N. Rosen, a co-author of A. Einstein, entitled “Plane Polarized Waves in General Relativity Theory” and published within the two-year period of the work of N. Rosen at the Institute of Physics of the Academy of Sciences of the UkrSSR has been analyzed in the context of the formulation and development of the theory of gravitational waves. The unknown earlier correspondence of V.M. Molotov and N. Rosen with A. Einstein was used to reveal the causes of Rosen’s staying in Kyiv, as well as to illustrate the debatable moments of the plane-polarized wave model in the framework of the general theory of relativity. Attention has been focused upon the fact that N. Rosen, during his residence period in the UkrSSR, had published – as a single author and in co-authorship with A. Einstein and G.P. Ilkovych – a number of papers devoted to the problems of gravitational waves and particles in the general theory of relativity.