

3<sup>rd</sup> International Conference on

# THEORETICAL AND CONDENSED MATTER PHYSICS

October 19-21, 2017 New York, USA

## Initial model of ether describing electromagnetic phenomena, including gravity

Ioan Has and Simona Miclaus  
Land Forces Academy, Romania

This work is based on results obtained in our two previous series of articles. In first series, an error was found in Michelson's analysis of interferometer experiment. But Einstein relied on it, while developing the SRT, eliminating ether from physics. Our results imply that ether can exist. In second series, we proposed and validated the hypothesis that Coulomb's law would better describe the reality including ether, by adding other terms to the left/right of actual term in  $r^{-2}$  including a term in  $-\ln r$ . So, the force existing between two distant dipoles, when computed with completed Coulomb's law, depends on  $r^{-2}$ , as in Newton's law. Numerically, the two forces were practically equal, resulting that the gravitation consists of dipoles interactions. For ether's structure, we proposed the HM16 model, in which the constituent etherons are placed in the nodes of a microcrystalline network, and manifesting forces of mutual attraction/rejection. The microparticles (MPs) consist of local zones of ether, where an energy intake induced a state of vibrations/vortexes. The vibrant MPs will transmit fundamental vibrations (FVs) in ether, which have a velocity  $cF$ . Stationary FVs do not transmit energy in the infinite ether, but FVs create interaction forces between MPs having electric/magnetic nature, giving gravitation. MP can expel/absorb an elementary special particle, the photon (F), which moves through ether with light speed ( $c$ ). The Fs constitute electromagnetic waves, which transmit energy in ether. The F photon creates its FVs in ether (dual aspect). Admitting  $cF > c$ ,  $cF$  corresponds to gravitational waves, resulting from dipole interaction between the MPs, given by completed Coulomb's law. HM16 explains the nature of the electric field as volumetric  $\epsilon$  strains and of the magnetic field as distortional  $\gamma$  strains of ether. HM16 also explains the various interactions between EM waves and MPs or collisions between MPs.

### Biography

Ioan Has has completed his license at Technical University of Constructions from Bucharest in 1965, where the Physics course was delivered by prof. Nicolae Barbulescu. He obtained PhD degree in Geotechnical and Foundation field, from TUCB, in 1979. He followed a doctoral Seminar in 1975 at International Mechanics Centre from Udine, Italy. He functioned as Professor at Geotechnical and Foundation Chair from TUCB and at Technical Disciplines Chair from Land Forces Academy, Sibiu. But now works as independent expert in constructions. He published over 110 papers (40 in physics) in reputed journals and participated at about 20 conferences (12 in physics).

hasavo@yahoo.com

### Notes: