

Papers #1-8 from Astronomische Nachrichten, circa 1920

First Paper (A.N. #5044, Vol. 211): 'New Theory of the Aether'

The Medium of the Aether is necessary for conveying Physical Action across Space...New Law of the Density & Rigidity of the Aether...Relation between Mean Molecular Velocity of a Gas & that of a Wave Transmitted in such a Medium...Elastic Power of the Aether...Table of Physical Constants of the Aether...The Aetherion...Explanation of the Propagation of the Wireless Waves around the Earth...Outline of the Wave Theory for Magnetism, Attraction & Repulsion...The Aether as an Infinite Aeolotropic Elastic Solid propagating Waves...Confirmation of Wave Theory by Lord Kelvin's Integrals of 1848...Geometric and Physical Conditions which the Forces generated must satisfy.....

Second Paper (A.N. #5048, Vol. 211):

Gravitational Action propagated with the Velocity of Light...Electrodynamic Wave-Theory of Physical Forces explains Motion of Perihelion of Mercury...Modification of Newtonian Law...Outline of the Cause of the Fluctuations of the Moon's Mean Motion...Gravitational Action is propagated by Stresses due to Waves in the Aether...Geometrical Conditions fulfilled by the Velocity-Potential  $\phi$ ...The Kinetic Theory of the Aether accords with the Views of Newton & Maxwell...New Theory of Stellar Aberration based on the Motion of Light relatively to the moving Earth...Sir Oliver Lodge's Experiments for detecting the Viscosity of the Aether, & Fitzgerald's Hypothesis. ....

Third Paper (A.N. #5079, Vol. 212):

Two Remarkable Theorems on the Physical Constitution of the Aether... Geometric & Physical Outline of the Relationship between Light, Magnetism and the Electrodynamical Action of a Current...Plane Waves of Magnets & the Law of Amplitude...High Velocity of the Electron under Charge explained by Acceleration due to Aether Waves...Aetherial Identity of the Velocity of Electric Waves with that of Light...Aetherions & "Electrical Mass"... Kinetic Wave Theory of Aether and the larger Problems of the Universe.....

Fourth Paper (A.N. #5048, Vol. 213):

Isotropic Aether & Radial Motion...Maxwell's Electromagnetic Theory of Light is incomplete...Geometrical Reasons why the Vibrations of Ordinary Light are mainly Transverse...Fundamental Objections to Fresnel's Theory of Linear Polarization of Reflected Light...Undulatory Explanation of the Phenomenon of Interference in Polarized Light...New Wave-Theory of Light accounts for all known Optical Phenomena...Wave-Theory of Gravity & Geometrical Theory of Confocal Conics.....

Fifth Paper (A.N. #5130, Vol. 214):

Outlines of Wave-Action Theory of Molecular Forces...The Rainbow in light of the Wave-Theory...New Theory of Surface Tension & of Capillarity based on Wave-Action...New Theory of Lightning...Droplets & Bubbles... Capillarity...Wave-Theory in Relation to Planck's Quantum Theory...Postscript. ....