

Abstract Submitted  
for the DFD07 Meeting of  
The American Physical Society

**The Explanation of the Photon's Electric and Magnetic Fields;  
and its Particle and Wave Characteristics** RUSSELL MOON, Dr., VICTOR  
VASILIEV, Pr. — Using the principles of the Vortex Theory, the creation of the  
photon's electric and magnetic components are explained: the condensed region of  
space is responsible for creating the photon's electric component and its particle  
effect; its expansion and contraction is responsible for its frequency; its motion  
through three dimensional space creates a wave in the surrounding space. This  
wave is responsible for the photon's magnetic component and wave characteristics.  
The simultaneous expansion and contraction of both the dense region of space that  
is the photon and the surrounding space it passes through explains why the electric  
and magnetic effects are at right angles to each other. Also the photon's particle  
and wave characteristics are explained. 1. Russell Moon, *The Bases of the Vortex  
Theory of Space*. Publishing house of ZNAK, Moscow, Russia, 2002, 32 pp., (in  
Russian). 2 R.G. Moon, *The Possible Existence of a New Particle: the Neutral  
Pentaquark?* Book of materials, The Research Centre of Ecological Safety of the  
Russian Academy of Sciences: Scientific Seminar Of Ecology and Space 1, February  
22, 2005, Saint-Petersburg, Russia, 2005, pp. 98-104.

Victor Vasiliev  
Pr.

Date submitted: 15 May 2007

Electronic form version 1.4