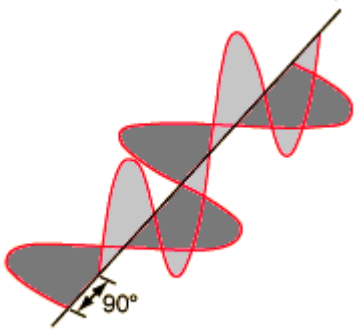
Photon Speed, Graphical Representation

"If I can't picture it, I can't understand it." Albert Einstein.

In free space, photons always travel with the fundamental speed of light (c=3x10^8 m/s, a universal constant of relativity), at all times, in all directions, in all inertial frames, independent of the relative motion of sources and detectors. Photons or electromagnetic waves are self propagating. This is possible only if the magnetic and electric fields are in *phase quadrature*.



The mathematical model of the free space Maxwell's equations needs to be modified so as to reflect on the phase quadrature relationship between the photon's transverse magnetic (H) and the electric (E) fields.

The mathematical symmetry of the free space Maxwell's equations, imply that the magnitudes of the transverse orthogonal magnetic (H) and electric (E) fields are physically equivalent. However, their numerical values in SI units are not equal since, the permeability and permittivity of free space have unequal numerical values in SI units.

Above is an extract from:
www.physicsphotons.org/Wave-Particle19.pdf