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The Tachyophoton

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In the previous chapter I have postulated the existence of a new wave, the **Tachyophoton**. Since this name is rather long let us call this wave the **T-wave**. The Tachyophoton is not a particle but a wave moving faster than light. It also has its antiwave the **T-Bar**. This wave comes in three different charged forms, the **T-Plus**, the **T-Minus** and the **T-Zero**. Each T-wave has its **antiwave**. I am not inclined to call this wave "a particle" because we can never observe it as a particle; it is never localized in space-time. But, never the less, the wave-particle duality is still valid for all other elementary particles.

The T-wave is like a spring having a very weak spring constant. Thus it can extend without limits and can exist both in our universe as well as in the Tachyon universe. It is rather like a photon moving faster than light. Therefore the T-wave is a force carrier and can be considered to be a Boson-Wave.

The T-wave is not only the intermediate wave between particles and antiparticles, it is also responsible for all kind of interactions between elementary particles. The T-wave has another important characteristic. Since it moves always faster than light it acts in reverse of the second law of Thermodynamics. That is, it can create "instantaneously" order out of disorder. In other words the T-wave reduces Entropy. All kind of natural formations and self organizations is the result of many T-waves acting as a group on material particles. Thus the gravitational force becomes an **attractive force** because the T-waves act as organizers on disorganized systems or disorganized groups of particles.

Bar magnets have always a north pole and a south pole. If we break the bar magnet in two, the poles form at each end instantaneously. The reason is that the attraction force between the opposite poles of the magnet is the consequence

of the order-forming T-waves. What we call "magnetic force lines" are the lines that the T-waves create. Below we see the magnetic force lines of a bar magnet.





Although we cannot directly observe the T-waves themselves, we can observe their effect. The earth's magnetic field is also the consequence of the T-waves organizational power. We see that the magnetic force lines emerge from one pole and enter the other pole. This situation is because the T-waves have a **fractal** characteristic. That is, they are self referential, self similar and recursive.

The magnetic force lines can also be observed on the human body. During an **MRI** (Magnetic resonance Imaging) scan the interaction between the patient and the recording instrument is not through the intermediary of any physical particle, but rather through the magnetic force lines. The MRI scanner is a tube surrounded by a giant circular magnet. The patient is placed on a moveable bed that is inserted into the magnet. The magnet creates a strong magnetic field that aligns the protons of hydrogen atoms within the body, which are then exposed to a beam of radio waves. This spins the various protons of the body, and they produce "a faint signal" that is detected by the receiver portion of the MRI scanner. The receiver information is processed by a computer, and an image is produced. But the *faint signals* can only be explained as being force lines created by the T-waves. This is because the whole body has been transformed into a collection of tiny bar magnets.

The T-waves are also responsible for instantaneous and faster than light information transfer. The **EPR thought experiment** was formulated by Einstein, Podolsky and Rosen in 1935 as a challenge to the Quantum Theory.



According to Quantum theory, if two particles interact and then move apart, the "wave function" describing their subsequent behavior always contains information about both particles **simultaneously**, however far apart they move. "Simultaneously" means that the information is transmitted –or exchanged-faster than light between particles. If a given property of one particle is changed, such as its spin direction, this change should be felt instantaneously by the other particle. Einstein did not believe in this instantaneous information transfer and called it "spooky action at a distance". Because according to his Theory of Relativity no information can travel faster than light.

Thus, he proposed the following thought experiment: Let us start with two electrons spinning in opposite directions. Then, let us then separate these electrons and change the spin direction of one electron in a given but different direction. This can be done with a strong magnet. Will the other electron "feel" that change and align its spin direction oppositely to the new direction of the first electron?

This experiment has been done in 1982 by Alain Aspect who has shown that what Einstein called "a spooky action at a distance" did actually occur. The correlation between the two particles, which were separated from each other at arbitrarily long distances, persisted and the information from one particle to the other was transmitted faster than the speed of light. In other words, the wave functions were **entangled**. Such interactions can now be explained as being mediated by fractal and recursive T-waves. The T-wave is also responsible for mediating the force between elementary particles, as shown below.

