

The Physical Nature of the Electron

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EM Waves

- Picture radiation beam flow and its waves
- light is the simple example
- This analysis will focus on high frequency waves
- Draw 3 waves (1,2,3) adjacent to each other with flow motion up and down within the waves and the flow being speed c .
- make the waves narrow like toothpicks, not like rounded sin waves
- The picture might suggest a seismograph detecting an earthquake

Gravity Interference

- Beams and waves continue thru space forever without interference
- Gravity bends/curves the beam flow as suggested by Einstein
- So, the beam flow direction will vary under the influence of masses depending on the local 'net' gravity force.

Bending

- Gravity influence bends light and thus any EM radiation beams.
- Waves have altitudes perpendicular to the beam flow and parallel to other waves.
- If the beam curves a beam altitude will not be exactly parallel to its prior wave.
- Draw wave 4 bent backward and causing overlap of beam 4 to prior beam

Intersections

- A wave bending back may contact its preceding wave
- This is contact of two oppositely directed flows forcing spin
- The contact suggests some electrical existence
- We can assume a more extensive bend will cause overlap which goes beyond contact

Electrons

- A wave (4) that bends across a prior wave (3) intersects (3)'s flow and ultimately will exit to complete its (4) wave.
- Two crossings occur.
- Wave 4 flows one direction when entering and oppositely when exiting beam 3.
- The crossings are electrons and have opposite spins.
- Physics designates the 2 spin directions as $\frac{1}{2}$ and $-\frac{1}{2}$.

- Electrons measure is quantum as they either exist or don't.

Matter Creation

- Niels Bohr assigned orbits and distances to electrons within matter, leading to the periodic table.
- I have proposed bending creates electrons
- If you have electrons you have matter
- EM beams – the closer to a mass surface the more the bending and electron creation.
- Earth's atmosphere is constantly being recreated.

Likewise, is surface matter.

More Electrons

- Bohr electrons orbit the nucleus with increasingly distant shells
- Shell 1 is the 2 electrons we have mentioned
- If wave 4 angles further back it crosses wave 2 along with wave 3.
- Wave 4 flow then crosses the up and down flows of wave 3 and the up flow of wave 2.
- This is 6 crossings, 3 of each spin

Subshells

- The second subshell -p- has 6 electrons.
- Bending back to wave 1 gives 4 more crossings totaling 10 electrons, thus the third subshell.
- Shells themselves number 2,8,18 etc
- Note the 8 electrons are $6+2$. We arrive at 8 by adding $6+2$ realizing that wave 3 also crosses into wave 2 adding 2 more crossings.
- Crossings of multiple waves become assigned to one central region - nucleus.

Protons and Neutrons

- All crossings/electrons are equal in size, some portion of the loop flow
- Electrons weigh the fixed $1/1800$ of a proton.
- Then the loop itself may provide sections as protons
- Loops without a crossing would then be the neutron
- Highly bent beams can produce multiply crossed and uncrossed loops

The Spectrum of Existence

- I have promoted the extension of the EM radiation spectrum in both directions
- 1. Very long wave radiation can penetrate matter like an arrow.
- Penetrated mass diminishes the force of the radiation giving a 'net' imbalance of pressure and a downward push called attraction gravity at exit point
- 2. The higher the frequency of waves the less the need of bending in order to overlap and create electrons

X-rays

- Potentially harmful X-rays are shielded by the atmosphere as they are converted to masses.
- Further shielding and further curvature of beams must occur from colliding with matter.

- Extreme curvature may circle back.
- Creating of electrons establishes a point. It remains in place.
- Remaining in place is the difference between radiation and matter. Electrons remain while the beam continues to flow.

Decay

- As bending is the source of matter, then removing electrons is done by lessening the bend/curl of the matter form.
- Reducing bend suggests nuclear decay is available to all elements.
- I replace the concept 'charge' with direction of motion. All interactions are a function of motion.

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