

Abstract Submitted
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Maintaining the First Bohr Orbit Radius by Photon Suppression

ERNST WALL, Institute for Basic Research, Palm Harbor, FL — We utilize a novel method for describing the mechanism that maintains the hydrogen atom's electron at its calculated first Bohr radius within 52 ppm of the experimental value. The basis of this model is a finite sized, revolving light speed point charge model of a vortex electron having a Compton circumference orbit. We relate the finite sized orbital radius of the vortex electron to that of the Bohr radius by means of the inverse fine structure constant to within 52 ppm. To determine the Bohr radius, this vortex electron model, as its charge revolves internally, generates a vortex of outwardly spiraling Compton length wavelets cyclotron fashion that are reflected off of the nucleus and back onto the electron. Previously, we explored impacts on the electron's charge. But here, the Compton wavelets in front of an accelerating electron are compressed, and those in back of it are decompressed, in both cases at a greater and greater rate, causing an increasing electric field across the electron's finite extent, and this generates photons. The reflected wavelets synchronously overlay the electron at the Bohr radius and neutralize its radiating electric field, suppressing its ability to radiate its energy away, holding it there. Ref.- www.tachyonmodel.com

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