

Abstract Submitted
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Disrupting the 3-Quarks fermion/baryon neutron model, the neutron is a sub-hydrogen atom. CLAUDE MASSOT, Retired — Plasma nuclear fusion has repeatedly failed for 50 years to produce any energy. It is thus urgent to reconsider the Standard Model of Elementary particles and the old Fermi elementary particle model for the neutron. Rutherford's assumption of the neutron as a proton with a closely bound electron, was thought dismissed by Chadwick's precise measure of the neutron mass which seemed too small, given estimates based on Heisenberg uncertainty, or too large as a simple proton electron addition. My new Post Quantum Physics, briefly presented at the recent April Washington Meeting of APS leads to a sub atomic model by rejecting three pillars of XXth Century Physics: 1) the theory of relativity, (clearly violated in the moving clock experiments). 2) the Heisenberg uncertainty principle which can be reduced by the fine structure constant $\times 1836$; and 3) the neutron as an 3 quarks elementary fermion. In my new theory the neutron is a sub hydrogen atom: a proton with an electron spinning at very high velocity, on a low unstable orbit, with a kinetic mass slightly larger than twice its rest mass and an unstable orbit about 137 times smaller than the Bohr radius. There are no quarks inside the neutron, just a proton and an electron. The potential impact is huge on new future approaches for fusion.

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