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Experimental Basis for IED Particle Model J. ZHENG-JOHANSSON — The internally electrodynamic (IED) particle model is built on three experimental facts: a) electric charges present in all matter particles, b) an accelerated charge generates electromagnetic (EM) waves by Maxwell's equations and Planck energy equation, and c) source motion gives Doppler effect. A set of well-kwon basic particle equations have been predicted based on first-principles solutions for IED particle (e.g. J Phys CS**128**, 012019, 2008); the equations are long experimentally validated. A critical review of the key experiments suggests that the IED process underlies these equations not just sufficiently but also necessarily. E.g.: 1) A free IED electron solution is a plane wave $\psi \doteq Ce^{i(k_d X - \omega T)}$ requisite for producing the diffraction fringe in a Davisson-Germer experiment, and of also all basic point-like attributes facilitated by a linear momentum $\hbar k_d$ and the model structure. It needs not further be a wave packet which produces not a diffraction fringe. 2)The radial partial EM waves, hence the total ψ, of an IED electron will, on both EM theory and experiment basis -not by assumption, enter two slits at the *same* time, as is requisite for an electron to interfere with itself as shown in double slit experiments. 3) On annihilation, an electron converts (from mass m) to a radiation energy $\hbar\omega$ without an acceleration which is externally observable and yet requisite by EM theory. So a charge oscillation of frequency ω and its EM waves must regularly present internal of a normal electron, whence the IED model.

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