Abstract Submitted
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The dynamic foundation of quantum mechanics V.J. LEE, University of Missouri-Columbia — Quantum mechanics has been reinvented via mathematical incarnation of Newton's 2^{nd} law in word for particle motion with an *almost nowhere* differentiable path. At *almost every* radius vector$x$, the particle has a velocity $\boldsymbol{u}$ in time forward and $\widetilde{u}$ in reversal. We formulate that$u = u_n + u_b$. The assumed stochastic radiation in vacuum causes that$\delta x_i \delta x_j = \delta_{ij} 2D\delta t \equiv \delta_{ij} (\hbar/m) \delta t$. That$\left[(\partial/\partial t) + u_n \cdot \nabla - iu_b \cdot \nabla - i (\hbar/2m) \nabla^2\right] (p_n - ip_b) = K_n - iK_o$ emerges as the 2^{nd} law; where $K_n$is an even function of time and $K_o$odd. Employing this law, we derive the Schrödinger equation with the paradigm,$(-i\hbar\nabla - qA) \psi = (p_n - ip_b) \psi$, in pediatrician terms. Those $\nabla^2 \rho (x_j) = 0$ specifyx_j's, wherep_b'sare *exactly* defined. For the case$A \equiv 0$, there are two pure cases: (a) $p_b$only; (b) $p_n$only. Miscategorization of$p_b$as$p_n$in quantum theory *status quo* is revealed in (a). Energy is *numerically computed* atx_j's, which explain atomic stability. That$p_n \cdot d = nh$ is the law of transmission of p_n through crystal planes, is derived in (b). Summary also on web: http://mysite.verizon.net/vjtlee/

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