Abstract Submitted
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On the Classical Derivation of the Numerical Values of Fundamental Quantum Constants FERENC BOZSO, Retired / TBM TJ Watson Research Center — It is shown that Planck's constant may be interpreted as four-space invariant, and it is presented that causal classical derivation of Planck's radiation law is feasible and plausible. Furthermore, it is shown that the numerical value of h can be calculated from classical physical quantities, specifically, from the speed of light and the wavelength of unit-energy photon. Such interpretation of Planck's constant leads directly to classical derivation and interpretation of the quantum Hall impedance, the magnetic flux quantum, and the fine structure constant, and permits the calculations of the numerical values of these fundamental quantum constants from classical physical quantities, i.e. from the electron charge, the speed of light and the wavelength of unit-energy photon.

Ferenc Bozso
Retired / TBM TJ Watson Research Center

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