Abstract Submitted
for the APR07 Meeting of
The American Physical Society

Checker Board Model THEDORE LACH — The Checker Board Model (CBM) is a 2D model of the nucleus that proposes that the synchronization of two outer rotating quarks in the nucleons accounts for magnetic moment of the nucleons and that the resulting magnetic flux couples (weaves) into the 2D checker board array structures and this 2D magnetic coupling in addition to electrostatic forces of the two rotating and one stationary quark accounts for the apparent strong nuclear force. The symmetry of the He nucleus helps explain why this 2D structure is stable. This model explain the mass of the proton and neutron, along with their magnetic moments and their absolute and relative sizes and predict the masses of two newly proposed quarks [(1)]: the "up" and the "dn" quarks. Since the masses of the "up" and "dn" quark determined by the CBM (237.31 MeV and 42.392 MeV respectively) did not fit within the standard model as candidates for u and d, a new model (New Physics) had to be invented. The details of this new nuclear physics model can be found at: http://checkerboard.dnsalias.net/ (1). T.M. Lach, Checkerboard Structure of the Nucleus, Infinite Energy, Vol. 5, issue 30, (2000). (2). T.M. Lach, Masses of the Sub-Nuclear Particles, nucl-th/0008026, @http://xxx.lanl.gov/

Thedore Lach

Date submitted: 15 Jan 2007 Electronic form version 1.4