## Abstract Submitted for the MAR07 Meeting of The American Physical Society

Physics in a Many-Centered Environment TALBOT A. CHUBB,

Physicist Consultant, 5023 N. 38th St., Arlington, VA 22207 — Physics in a many-center environment was born as the electron physics of metals. Electrons moving from the electrolyte of a battery to anode metal become quasi-particles with a many-centers geometry<sup>1,2</sup> The Ion Band State Theory of cold fusion assumes that a fraction of the deuterons in  $PdD_x$  reconfigure to a many-centers geometry<sup>3</sup>. Many-center geometry seems to apply to deuteron populations in nano-metal crystals as studied by Arata and Zhang, to Bloch-sensitive nuclei created in Iwamura's permeation studies, to the metastable nuclei forming alpha shower flakes as discovered by Oriani and Fisher and reproducibly produced by P. Mosier-Boss.

<sup>1</sup>T.A. Chubb, Infinite Energy, Issue 70, in press (2006)

<sup>2</sup>T.A. Chubb, "Many-Centers Nuclei," submitted to Infinite Energy

<sup>3</sup>T.A. Chubb and S.R. Chubb, Fusion Technol., 20, 93 (1991)

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