Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Engineering of Condensed Matter Nuclear Physics: Heterodyne Behavior in Condensed Matter Nuclear Systems MITCHELL R. SWARTZ, JET Energy, Inc., Wellesley, MA 02481 — Previously, we reported methods[1,2] to semi-quantitatively measure and control tardive thermal power (TTP) which develops long after the termination of electric input power in condensed matter high-deuteron-flux Phusor devices providing (Pt/D2O/Pd; 0.5 cm^3) peak excess power ratios circa 2.30+/-.84 [2,3]. Now we report one method to improve excess energy using heterodyned CMN systems using both normal and TTD operation - heterodyne operation (that is, ' *hetero* ' for other, and ' *dyne* ' for power). By augmenting the conventional excess energy produced by CMN active systems (normal operation) with the additional energy ("other power") resulting from the time integral of TTP ("heat after death"), the net time-integrated excess energy (output energy beyond that applied as the input energy) is greater than we have previously reported[2] and may be maximized using TTD drive techniques[1]. Initial experiments of heterodyned active samples, capable of excess heat operation at the optimal operating point, have yielded excess energy increases of up to four times beyond that obtained without heterodyned operation.

[1]M.R. Swartz, Bull. of the APS, 50, #1, part 2, 1203 (2005).
[2]M.R.Swartz, Proc ICCF10, 29-44; 45-54, and 213-226 (2006).

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Date submitted: 29 Nov 2006 Electronic form version 1.4