

Abstract Submitted
for the DPP06 Meeting of
The American Physical Society

Accelerate the transition of radioisotopes or unwanted weapons-grade ^{239}Pu into stable nuclei with a system of high frequency modulation for a net energy gain EUGENE PAMFILOFF, Dept. of Physics and Astronomy, University of Georgia, UGA; Optigon Research and Development, Division of Vivitar, VPDM, CA, retired — A process of high frequency stimulation of nucleons can be utilized for the accelerated fission, decay or controlled transition of unstable isotopes. For example ^{238}U could be persuaded to transition promptly into ^{206}Pb , where portions of the total mass difference of 29873.802 MeV per nucleus becomes available energy. The proposals of this paper describe an effective system for nuclei stimulation configured to accelerate such a series of 14 transitions over several milliseconds, instead of 4.47×10^9 years. Positive ions or ionized capsules of fuel suspended by magnetic fields and subjected to the system of correlated frequency modulation of multiple beam lines, tailored to the specific target, will emit sufficient energy to stimulate subsequent targets. The system can be applied to all radioisotopes, including ^{232}Th , nuclear waste product isotopes such as ^{239}Pu , and a variety of other suitable unstable or stable nuclei. Through the proposed confinement system and application of high frequency stimulation in the 10^{22} to 10^{24} Hz regime, the change in rest mass can be applied to both the fragmentation of subsequent, periodically injected targets, and the production of heat, making a continuous supply of energy possible. The system allows the particle fragmentation process to be brought into the laboratory and provides potential solutions to the safe disposal of fissile material.

Eugene Pamfiloff
Dept. of Physics and Astronomy, University of Georgia, UGA;
Optigon Research and Development, Division of Vivitar, VPDM, CA, retired

Date submitted: 19 Jun 2006

Electronic form version 1.4