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A Neutron Gas Laser, can there be particle Lasers? RICHARD KRISKE, University of Minnesota — This author had suggest previously that it may be possible to irradiate Xe-135 with Gamma or X-rays and cause it to become a super positioned state with Cs 135 or Xe 136. The Neutrons would essentially be a Neutron Gas. In many ways this would act like a gas Laser, with the Gamma or X-ray pumping a much higher energy state, the Neutron Gas. The Neutrons would be emitted at the same frequency as the Gamma or X-ray pumping the system. The system would follow a similar math that is followed by other Nobel Gas Lasers. If this is possible it adds a whole new chapter to Laser theory, in that now it would be extended to "matter" lasers, not just photons. These matter Lasers would be far superior to current Particle Accelerators in producing beams. It may be possible to produce Proton Lasers, and perhaps even Higgs Particle Lasers. This is a very surprising addition to Laser theory, but one can see that it was already portended from the Einstein Equations in regard to current Lasers. These new Lasers would have additional Quantum Numbers that aren't in Light Lasers and would be a boon to Particle Physics investigations, not to mention that they would have great technological uses, such as Propulsion tools for Space probes, as they would use light to directly produce mass.

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