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Using Dyson's probability expression for Gerstsenshtein coupling between Photons and Graviton interaction for minimum B field in Tokamak GW Detection Experiment, and possible developments if a refinement on the Gertsenshtein process is confirmed experimentally ANDREW BECKWITH, Guest researcher at Chongqing University, PRC — As of 2012, and put in a journal in 2013, Dyson came up with criteria as to the Gertsenshtein process in photon-graviton coupling, with criteria as to the likelihood as to if the Gertsenshtein process actually can occur. This methodology is applied to a small spatial geometry as to Tokamak's with a 100% probability of Gertsenshtein coupling of gravitons and photons, if there is a magnetic field of magnitude 10 to the 9th power, Gauss. This coupled with a GW and graviton frequency of order 10 to the 9th power, Hertz. The high GW frequency is justified in a prior analysis done by the author, and the magnetic field of 10 to the 9th power Gauss is enough to insure that within a GW detector that there is the likelihood of the Gertsenshtein process occurring. This threshold magnetic field strength is tied into a probability of measurement of the Gertsenshtein process, allowing for GW measurements as a signature, in the Tokamak GW experiment.

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