

Generation of photons and passing time

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Abstract – The generation of photons has been discussed in many papers for a long time, however, it still has some interesting and important unsolved problems. In this paper an approach is presented which gives new results on the relationship between the processing time of photon generation and the utilized energy. That relationship can be extended to other processes in photonics stating as a general rule that the processing time is inversely proportional to the utilized energy. As a consequence, the ratio of the spectral energy densities at two radiation frequencies is proportional to the square of the ratio of the radiation frequencies.