

Abstract Submitted
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The Problem of Big Bang Matter vs. Antimatter Symmetry

ROGER ELLMAN, The-Origin Foundation, Inc. — The equal matter and antimatter of a spherically symmetrical Big Bang should have mutually annihilated. A skew of the symmetry in favor of matter, all of the antimatter annihilating with part of the matter, is deemed to have made an all matter universe. Research seeks a violation of matter / antimatter symmetry to justify that skew. From analysis of the mechanism of mutual annihilation a total annihilation of original Big Bang matter and antimatter could not have occurred. Our present universe must contain equal amounts of both forms between some particles of which mutual annihilations can occasionally occur, current indication of which is Gamma Ray Bursts [GRB's]. It has been found that the GRB's rate increases with red shift over the range $z = 0 - 4$ as about $(1 + z)^{1.5}$, which means the rate increases significantly with time into the past. That is inconsistent with the currently favored massive supernovae core collapse hypothesis for GRB's and supports GRB's being cosmic matter / antimatter mutual annihilations.

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