

The twistor lift of TGD forces the analog of Kähler form for M^4 . Covariantly constant self-dual Kähler form $J(CD)$ depends on causal diamond of M^4 and defines rest frame and spin quantization axis. This implies a violation of CP , PP , and PT . By introducing a moduli space for the Kähler forms one avoids the loss of Poincare invariance. The natural question is whether $J(CD)$ could relate to CP breaking for K and B type mesons, to matter antimatter asymmetry and the large scale parity breaking suggested by CMB data.

The simplest guess for the coupling strength of $U(1)$ interaction associated with $J(CD)$ predicts a correct order of magnitude for CP violation for K meson and for the antimatter asymmetry and inspires a more detailed discussion. A general mechanism for the generation of matter asymmetry is proposed, and a model for the formation of disk- and elliptic galaxies is considered. The matter antimatter asymmetry would be apparent in the sense that the CP asymmetry would force matter-antimatter separation: antimatter would reside as dark matter (in TGD sense) inside magnetic flux tubes and matter outside them. Also the angular momenta of dark matter and matter would compensate each other.