

The interaction between number theoretic vision, ZEO, and the TGD view DNA enriches all of them. In this article the recent view about quantum measurements is discussed in light of the recent progress in the understanding of the number theoretic aspects of TGD.

By  $M^8 - H$  duality space-time regions would be determined by polynomials whose roots define in  $M^4 \subset M^8$  3-D mass shells providing the data for holography fixing the space-time surfaces. Whether product polynomials besides irreducible polynomials should be allowed has been an open question. The product polynomials could naturally correspond to free states unable to entangle. The functional composition was earlier interpreted as formation of many-particle states but perhaps a more natural interpretation is as a generation of sheets of the many-sheeted space-time with interactions having wormhole contacts as geometric correlates.

This modified picture leads to a re-analysis of state function reduction (SFR), in particular the notions of "big" SFR and "small" SFR from a number theoretic perspective. This leads to a more precise view about the notion of time and time evolution. The emerging picture can be applied to TGD inspired theory of consciousness, in particular various aspects related to the notion of time and memory.