
Topological field quantization

1. Topological field quantization means topological quantization of classical fields associated with particle so that physical system has field identify: field body or magnetic body.
2. Topological field quantization is due to the compactness of CP_2 implying that field space is effectively compact unlike in Maxwell's theory. In positive energy ontology the "Bohr orbit" property of preferred extremals would also favor topological field quantization. In zero energy ontology (ZEO) Bohr orbitology is not absolutely necessary since 3-surfaces are pairs of space-like 3-surfaces at opposite boundaries of CD. If preferred extremal property poses additional conditions also in this case, it means strong correlations between these 3-surfaces. Only very specific field patterns would be realized such as magnetic and electric flux quanta and "topological light rays representing the analogs of field quanta of radiation field.
3. Topological field quantization means the loss of even approximate linear superposition of classical fields which is replaced with the superposition of effects of classical fields which is enough to explain the experimental facts and means basic distinction with respect to Maxwell's theory and gauge theories.
4. Topological field quantization implies the notion of magnetic body central in TGD inspired quantum biology.