Periodic Universes, Parallel Universes and Spin and Charge Features

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ABSTRACT: The Born-Carman conditions and the Duff periodic time has been presented as the proofs of the existence of the periodic universes.
However, the situations of the structures creating a tunnel to another universe have been discussed. Once more one has analyzed the formula $Q = Q_0 \left| e^{i\left(\frac{2k\pi}{n} + \varphi\right)} \right|$. One has concentrated on the situation when this circle was orbited a finite number of times.

The Born-Carman conditions [1] testify both to the existence of the structures of successive spin sacks in high temperature superconductors [2] and to the existence of the parallel universes. It is so, because the periodicity of wave function on the ends of a crystal implicates the multiplicity of crystals and such a universe can be treated as a crystal with unempty vacuum.
Moreover, the Duff periodic time [3] has a repercussion on the periodic structure of space.
We have:

$$x' = \frac{x - vt}{\sqrt{1 - \frac{v^2}{c^2}}} \quad \text{and} \quad t' = \frac{t - \frac{v}{c^2}x}{\sqrt{1 - \frac{v^2}{c^2}}}$$

t is periodic, so t' and x' grow linearly with x and are modulated periodically by the time.

This linearity isn't total, because the radical $\sqrt{1 - \frac{v^2}{c^2}}$ contains v, and $v = \frac{dx}{dt}$ and t is periodic.
The fact that certain structures don't pass into themselves after coming full circle testifies to that the singularities, which make it possible, create a tunnel to a parallel

universe. This twist of this structure must after all be continued in another part of the reality.
The example of this twist is a spinor, which after the turn around the angle 360^o turns round the angle 180^o.

The projection of the vector of spin onto an axis is equal $s_2 = \frac{1}{2}\hbar\, n \quad n \in Z.$
The charge is given by the formula [4]:

$$Q = Q_0\ e^{i\left(\frac{2k\pi}{n} + \varphi\right)}$$

and is placed regularly on the circle similarly to the projection of spin on a straight line. Spin and the projection of spin are charges, too (in the sense of the Dirac equation).
Spin is described by the logarithmic terms of the equation of field and creates a more complicated structure on the plane of the charge. Since spin and charge are the same from the point of view of the formalism of the Dirac equation, so both the continuous and discrete symmetries must have the same character.
We have:

$$Q = Q_0\ e^{i\left(\frac{2k\pi}{n} + \varphi\right)}$$

It doesn't need to be k ≤ n. Then the poles of interactions are placed on the circle, which is orbited a finite number of times.
If $\frac{k}{n} \notin$ W , the circle is orbited an infinite number of times.
The problem arises, which interactions the poles (irregularly placed on the circle of interactions) correspond with.

The dualism loop-particle exists. The loop is described by the formula:

$$L = A\, e^{i\varphi}$$

so, after finding the logarithm:

$$lnL = lnA + i\varphi + 2k\pi \qquad k \in Z$$

The multiplicity of the solutions corresponds to one solution in the curved Riemann space. This solution is a tunnel, which starts from each to a parallel universe or to the Megaverse.

References:

[1] C. Kittel, “Introduction to Solid State Physics”
[2] Z. Morawski, ”Mechanism of High Temperature Superconductivity”, this website
[3] M. J. Duff, C. N. Pope, E. Sezgin, Physics Letters B, vol. 225, no. 4; 27 July 1989
[4] Z. Morawski, ”Attempt at Unification of Interactions and Quantisation of Gravitation”, this website