

Terry Bollinger 2007-09-13.17:23 Thu

2007-09-13.16:45 Thu - Summary so far: 4D quantum dynamics

- (1) The space in which the universe exists consists of four Euclidean, fully symmetric dimensions.
- (2) Each point in this space is capable of moving in a two-dimensional planar circle with arbitrary (isotropic) orientation in the 4D space.
- (3) Multiple points can ^(must?) participate in a given rotation^{TR}, resulting in disk-like (or ring-like?) patterns of circulation. A narrow ring has the form of a simple loop, albeit in 4D space.
- (4) Points behave, to some degree, like hard spheres; they cannot interpenetrate, at least not easily.
- (5) The combination of points (3) and (4) means that stable rotation patterns must necessarily be repeating patterns. The points must in effect play "follow the leader" to move as a group without incurring the high cost of displacing other points. [Note: "squeezing" points at high energy cost could provide a mechanism for curvature of spacetime; see below.]
- (6) In 4D, two equally viable circulation paths always exist, perpendicular to each other, for any defined plane of circulation.
- (7) The two perpendicular circulation paths can exist at the same time for the same region and set (as defined by a shared center of rotation) of points.
- (8) At a small enough scale, however, the mutual impermeability of the points creates a conflict at the center of both rings, since the other

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