

Lanczos Potential and Tewari's space vortex theory

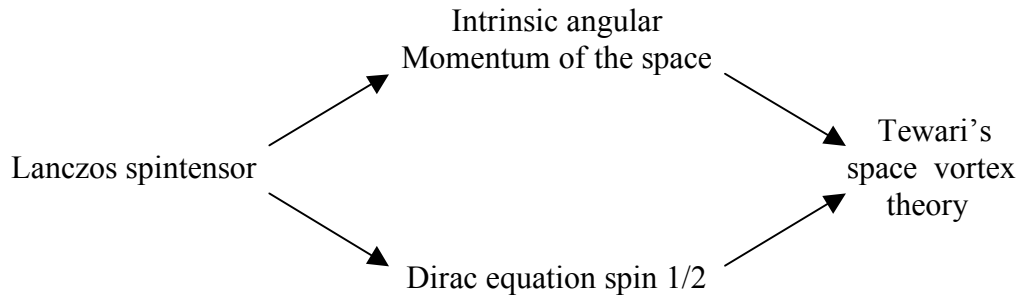
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ABSTRACT. This brief note has a speculative character. It is a proposition to investigate the possible connection between the Lanczos spintensor and the space vortex in electron structure.

In the gravitational theory of Einstein, the conformal tensor of Weyl C_{ijkl} contains the full geometric information about spacetime. Cornelius Lanczos¹ revealed the important fact that in every spacetime there is a potential K_{ijr} of the tensor C_{ijkl} . It is surprising that in the analysis of K_{ijr} for weak gravitational fields one obtains the Dirac equation for one half spin particles that belongs to the electron, because of this, K_{ijr} is named the Lanczos spintensor. We have also pointed out in several investigations^{2,3} that Lanczos potential is a kind of intrinsic angular momentum of the spacetime. On the other hand, Tewari^{4,5} has proposed his space vortex theory to explain electron capture directly from space via the N-machines for the free power generation, supposing in fact that the vacuum is not quite empty^{6,7,8}.

Our proposition is to study the following schematized relationships:



If this proposition is correct then the Lanczos potential will supply a strong theoretical support to Tewari's theory.

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