THE ALGORITHM OF THE GRAPH EMBEDDING IN PSEUDO EUCLIDIAN SPACE WHICH COMMUTATES WITH THE ACT OF LORENZ GROUP.

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We use the metric algebra which is worked out by author. That is algebra with unit and it has dimension n+1 with the generators e0,e1,…,en. The multiplication table is e0*ei=ei*e0=ei; ei*ej=g(i,j)e0, i,j>0, where g is arbitrary metric tensor. Automorphism of the metric algebra is the same as automorphism of the metric on the subspace <e1,…,en>. If the Minkowski metric is determined then the automorphism of metric algebra are same the Lorenz group. That algebra with addition and multiplication operations may be used as generator for the infinite point set which is injected in Minkowski space. The Generator is extended by operations of the mutual pseudo orthogonal projection of vectors, and still by Lorenz operators for input in the origin which correspond vector as the directrix of the world line. On each stage of the generation the number of points is finite. Therefore it may to build the edges of the graph using Minkowski distant among points. That system of the graph synthesis commutates with the Lorenz group. That permits to using it as the model of the discrete space-time in theory of the quantum gravitation. There are several modifications of the graph generation algorithm. References.

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