

Cayley Formula, Euler Parameters and Rotations in 3–Dimensional Lorentzian Space

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Abstract. In this study, by using Lorentzian matrix multiplication, Cayley formula and Euler parameters of a Lorentzian orthogonal matrix are obtained in Lorentz space L^3 . Then, by using Euler parameters of a rotation in a split quaternion, the split quaternion equation of a rotation movement is obtained in the space L^3 .

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