

## LIGHTLIKE GEOMETRY OF WORLD SHEETS IN LORENTZ SPACE FORMS

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There are three kinds of Lorentz space forms. Lorentz-Minkowski space is a flat Lorentz space form, de Sitter space has a positive curvature and anti-de Sitter space is a negatively curved one.

In this talk we stick to Lorentz-Minkowski space. We have similar results to other Lorentz space forms.

A world sheet in Lorentz-Minkowski space is a timelike submanifold consisting of a one-parameter family of spacelike submanifolds

in Lorentz-Minkowski space. In this talk we explain lightlike flat geometry of world sheets in Lorentz-Minkowski space as an application of the theory of wave front propagations.

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