Singularities of Legendrian flat dual surfaces of a spacelike curve in the lightcone

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Abstract

In this talk which is based on a joint work with Kentaro Saji, we deal with Legendrian flat dual surfaces in various radius pseudo-spheres of a spacelike curve in the lightcone by using the extended Legendrian dualities in Lorentz-Minkowski 4-space. For our purpose, we take into account some of the extended Legendrian dualities given in [1] and introduce new extended Legendrian dualities. Moreover, we focus on the singularities of these Legendrian flat dual surfaces and the dualities of the singularities.

References

[1] S. Izumiya, H. Yıldırım, *Extensions of the mandala of Legendrian dualities for pseudo-spheres in Lorentz-Minkowski space*, Topology and its Applications, **159** (2012), 509–518.