

# On extended Legendrian dualities and their applications

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## Abstract

In this talk, first one-parameter families of Legendrian dualities in [2] which are the extensions of four Legendrian dualities defined in [1] for the pseudo-hyperspheres in Lorentz-Minkowski space will be shown and an extended duality theorem will be given. Then, some applications of these extended Legendrian dualities will be presented. If time permits, these applications will be interpreted as special cases of our results in [3].

## References

- [1] S. Izumiya, Legendrian dualities and spacelike hypersurfaces in the light-cone, *Moscow Mathematical Journal* **9** (2009), 325–357.
- [2] S. Izumiya and H. Yıldırım, Extensions of the mandala of Legendrian dualities for pseudo-spheres in Lorentz-Minkowski space, *Topology and its Applications* **159** (2012), 509–518.
- [3] S. Izumiya and H. Yıldırım, Slant geometry on spacelike submanifolds of codimension two in Lorentz-Minkowski Space, *Journal of Geometry and Physics* **98** (2015), 160–180.