On Extended Legendrian Dualities for the Pseudo-Spheres in Lorentz-Minkowski Space

Handan Yıldırım

Istanbul University & Michigan State University

Abstract

In this talk, after one-parameter families of Legendrian dualities in [5] which are the extensions of four Legendrian dualities defined in [4] for the pseudo spheres in Lorentz-Minkowski space are showed, some applications of these extended Legendrian dualities are given, [2, 5, 6].

References

[1] V. I. Arnol'd, S. M. Gusein-Zade and A. N. Varchenko, *Singularities of Differentiable Maps*, Vol. I, Birkhäuser, 1986.

[2] M. Asayama, S. Izumiya, A. Tamaoki and H. Yıldırım, Slant geometry of spacelike hypersurfaces in Hyperbolic space and de Sitter space, *Revista Matemática Iberoamericana* **28(2)** (2012), 371–400.

[3] D. E. Blair, Contact manifolds in Riemannian geometry, *Lecture Notes in Math.*, Vol. 509, Springer, 1976.

[4] S. Izumiya, Legendrian dualities and spacelike hypersurfaces in the lightcone, *Moscow Mathematical Journal* **9** (2009), 325–357.

[5] 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.

[6] S. Izumiya and H. Yıldırım, Slant geometry of spacelike hypersurfaces in the lightcone, *Journal of the Mathematical Society of Japan* **63(3)** (2011), 715–752.