

1078-53-136

Liang Chen* (chenL234@nenu.edu.cn), Renmin street No. 5268, Changchun, Jilin 130024, Peoples Rep of China, **Shyuichi Izumiya** (Izumiya@math.sci.hokudai.ac.jp), Kita 10, Nishi 8, Kita-Ku, Sapporo, Hokkaido 060-0810, Japan, and **Masaki Kasedou** (Kasedou@math.sci.hokudai.ac.jp), Kita 10, Nishi 8, Kita-Ku, Sapporo, Hokkaido 060-0810, Japan. *Singularities of projective Gauss images of surfaces in Anti de Sitter 3-space.*

We investigate the geometrical properties of general compact surfaces in Anti de Sitter 3-space from the view point of Legendrian singularity theory. We define the projective Gauss image on the compact surface and study the geometric meanings of singularities of this map. As applications we study the contact of general compact surfaces with some model surfaces. (Received December 02, 2011)