

Orientability and co-orientability of some classes of wave fronts

Atsufumi Honda

Miyakonojo National College of Technology

Email: *atsufumi@cc.miyakonojo-nct.ac.jp*

Recently, wave fronts are investigated intensively, where a wave front is a projection of a Legendre surface of the unit tangent bundle. Briefly speaking, wave fronts are surfaces with admissible singularities. Murata-Umehara proved global properties of flat wave fronts in the Euclidean 3-space. One of the most interesting and deepest results is that complete flat fronts must be orientable and co-orientable. In this talk, we shall discuss orientability and co-orientability of some classes of wave fronts in space forms.