

1126-53-87

Ivan C Sterling* (isterling@smcm.edu), 18952 E Fisher Rd, St Marys City, MD 20686-3002,
and **Josef F. Dorfmeister**. *Box Surfaces, Lorentz Surfaces and PS-Fronts*. Preliminary report.

Joint work with Josef F. Dorfmeister. Immersions $f : S \rightarrow \mathbb{R}^3$ with constant curvature $K = -1$ have been extensively studied in the case where S is a rectangular domain with standard Minkowski coordinates. In particular Toda's algorithm may be used to produce all examples. In this talk we generalize the existing definitions and theories to the more intriguing case where S is in arbitrary surface. Here not all box surfaces are Lorentz surfaces. In particular the theory of ps-fronts and Todo's algorithm in this more general setting will be explored. (Received January 05, 2017)