Meeting: 1003, Atlanta, Georgia, AMS CP 1, AMS Contributed Paper Session

1003-53-989 Sungwook Lee (sunglee@usm.edu), Box 5045, Department of Mathematics, University of Southern Mississippi, Hattiesburg, MS 39406, and Jeffrey H. Varnado\* (Jeffrey.Varnado@usm.edu), Box 5045, Depatment of Mathematics, University of Southern Mississippi, Hattiesburg, MS 39406. CMC Spacelike Surfaces of Revolution in Minkowski 3-Space. Preliminary report.

We classify constant mean curvature (CMC) spacelike surfaces of revolution in Minkowski 3-Space with respect to spacelike, timelike, and lightlike axis. In each case, we get a nonlinear second-order differential equation whose solutions give rise to CMC spacelike surfaces of revolution. We construct examples of such CMC surfaces of revolution by solving those equations numerically. Delaunay, unduloid, and nodoid type surfaces are defined and constructed. We also classify all maximal surfaces of revolution in Minkowski 3-Space. (Received October 01, 2004)