

Fig. 65 n = 3 circumferential waves non-axisymmetric linear buckling mode shape from STAGS for the optimum design of the **isogrid-stiffened** equivalent ellipsoidal shell listed in Table 52. The optimum design was obtained with BIGBOSOR4 with the use of plus and minus axisymmetric **mode 1**, **mode 2**, **mode 3**, **and mode 4** imperfection shapes with amplitude, Wimp = 0.2 inch. This STAGS buckling mode corresponds to eigenvalue no. 12. **Shells of revolution with imperfections with this non-axisymmetric shape cannot be handled by BIGBOSOR4.** Therefore, GENOPT optimization occurs in the presence of only axisymmetric buckling modal imperfections.