



Fig. 4 First **axisymmetric** linear bifurcation buckling mode shape of the optimized **isogrid-stiffened** shell as computed by BIGBOSOR4. The corresponding linear bifurcation buckling pressure according to BIGBOSOR4 is  $p(\text{crit}) = 1305.7$  psi. The program STAGS obtains a linear bifurcation buckling pressure of 1304.1 psi for this shell. (See Fig. 6). This axisymmetric mode, predicted by BIGBOSOR4, corresponds to the lowest eigenvalue in the STAGS model, as listed in Table 41. Compare with Fig. 6. This axisymmetric buckling mode is what is called in GENOPT jargon “**mode 1**”. Plus and minus versions of “mode 1” are used as initial axisymmetric imperfection shapes in computations of the local skin and stiffener stresses and buckling load factors, axisymmetric collapse loads, and general nonlinear bifurcation buckling load factors.