

Thus, we need *two* indices (m, n) to fully specify the 2-D modal vibration harmonics of the circular membrane *because* it is a 2-dimensional object. Low-lying eigenmodes of 2-D *transverse* displacement amplitudes are shown in the figures below:

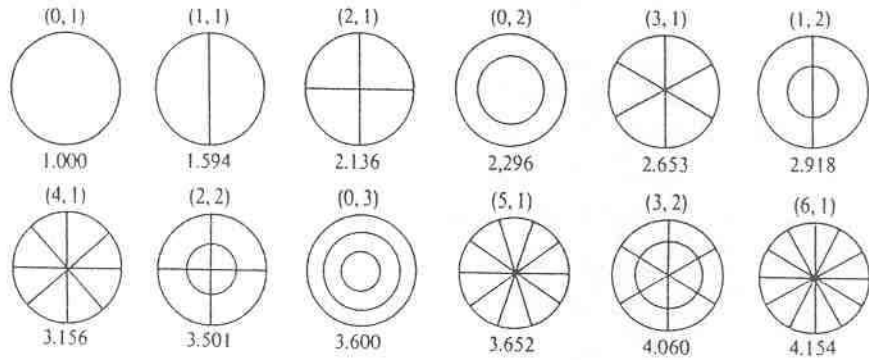


FIGURE 3.6. First 14 modes of an ideal membrane. The mode designation (m, n) is given above each figure and the relative frequency below. To convert these to actual frequencies, multiply by $(2.405/2\pi a)\sqrt{T/\sigma}$, where a is the membrane radius.

