

\vdots

$$m_{\text{eff}} = \frac{4}{R} \text{ ————— } \times 2$$

$$m_{\text{eff}} = \frac{3}{R} \text{ ————— } \times 2$$

$$m_{\text{eff}} = \frac{2}{R} \text{ ————— } \times 2$$

$$m_{\text{eff}} = \frac{1}{R} \text{ ————— } \times 2$$

$$m_{\text{eff}} = 0 \text{ ————— }$$

The spectrum of a Kaluza-Klein reduction of a real massless scalar field on a S^1 , is linear and every mode other than the massless is doubly degenerated (corresponding to eigenvalues $\pm n$).