

# Harmonic $\rightarrow$ Poeschl –Teller

$$H^{(I)}(q, p) = \frac{1}{2} p^2 + \frac{1}{2} \omega^2 q^2$$

$$H^{(F)}(q, p) = \frac{1}{2} p^2 - \frac{1}{2} \alpha^{-2} (\cosh^{-2} \alpha q - 1)^2$$

$$\alpha = [J(J+1)]^{-1/4}$$

