

# Damped, Driven, Duffing Oscillator

$$\frac{d^2y}{dx^2} + \delta \frac{dy}{dx} + \alpha y + \beta y^3 = \gamma \cos \omega x$$

$$\frac{d^2y}{dx^2} = -\alpha y - \beta y^3 - \delta \frac{dy}{dx} + \gamma \cos \omega x$$