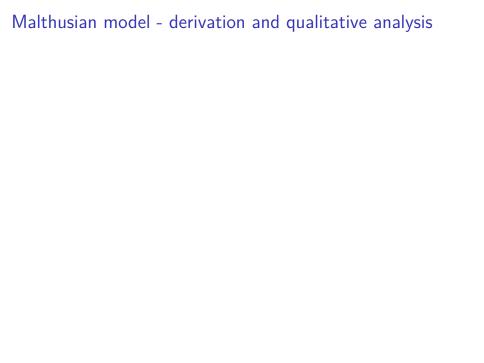
MA32009 Lecture slides

Philip Murray

Lecture 1



A general model

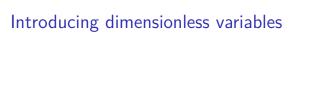
$$\frac{dN}{dt} = f(N)N = H(N),$$

Numerical solution

Dimensions and nondimensionalisation

As an example, consider the linear ODE

$$\frac{dN}{dt} = rN.$$



Steady-state



Graphical solution

Bifurcation diagrams