WKB approximation – used to find the probability distribution of x in state space of x (eg. population size). X is treated as a continuous random variable, you have an Ansatz (assume form of the distribution) which you solve for.

“Fokker-Planck” for large populations, small noise, continuous variable. Fails for moderate to large noise problems. In essence, probability distribution of small perturbations around a steady state. (eg. for infected populations)

Master equation: written as the dx/dt which solves for the location of your population x in state space at any time t. The RHS of the equation is the possible state changes that can occur (eg. birth \* Xn-1 – birth \* Xn + death \* Xn+1 – death \* Xn)

The concept is s.t. it is a two well problem. Stochasticity of rising