Chapter 1

Method

In this chapter we begin by considering finite difference equations for the McKendrick-von Foerster Equation with constant coefficients instead of the non-linear equations seen to be created using the Jump-Growth Equation.

1.1 Constant Coefficients

The obvious starting point when studying any PDE problem is to study the case of constant coefficients as a starting point. If we take **??** with g, μ and D constant then we have a a very simple equation to discretize and study:

$$u_t = -g \cdot u_w - \mu \cdot u + \frac{D}{2} u_{ww}. \tag{1.1}$$