

If $N(t)$ satisfies the equation

$$N(t) = N(t - t_1) + N(t - t_2) + \dots + N(t - t_n)$$

Then according to a well known result in finite differences, $N(t)$ is then asymptotic for large t to X_0^t where X_0 is the largest real solution of the characteristic equation :

$$X^{-t_1} + X^{-t_2} + \dots + X^{-t_n} = 1$$