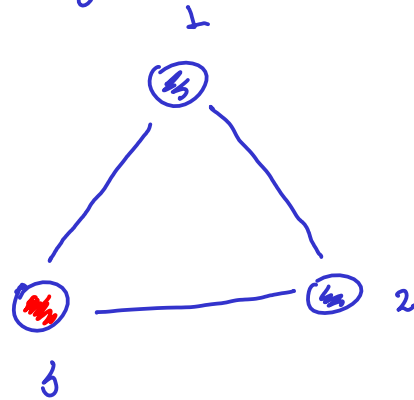


$$A = \begin{pmatrix} 0 & a_1 & \dots & a_{N-1} \\ 1 & 0 & \dots & 0 \\ \vdots & \vdots & \ddots & \vdots \\ N-1 & 0 & \dots & 0 \end{pmatrix}$$

Matriz de Adyacência



$$i \rightarrow 0 \rightarrow N-1$$

$$j \rightarrow i+1 \rightarrow N-1$$

$$t=0$$

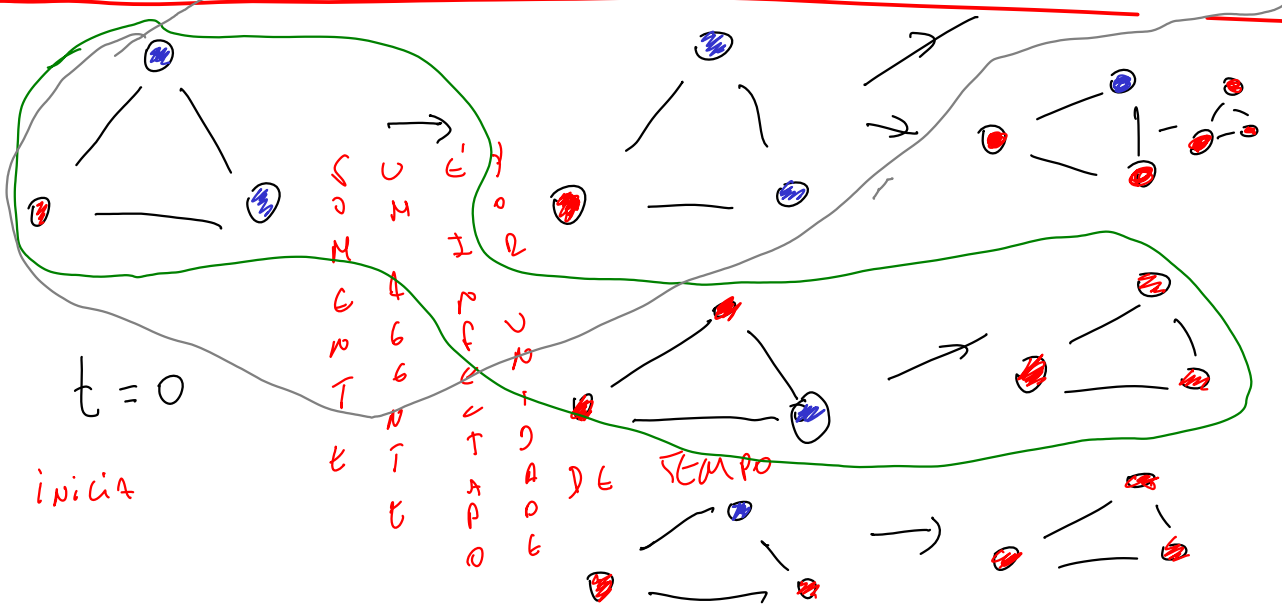
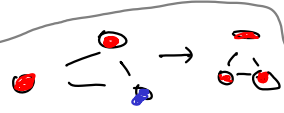
$$N(0) = N_0$$

$$\vec{v} = \begin{pmatrix} a_1 \\ a_2 \\ a_3 \end{pmatrix}$$

Vetor de estados

processos Markovianos

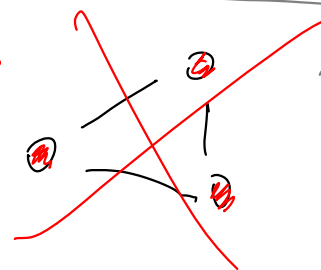
$$a_i = \begin{cases} 0 & \text{suco} \\ 1 & \text{infetado} \end{cases} A$$



Evolucao Temporal do Sistema

t=0

inicia



O processo de múltipla infecção não é considerado!!

Processo Poissoniano!!!