Output $r(j \cdot dt)$, $j = 1, 2, \ldots$, into r

Initialize P to be diagonal

$$P_{xy,xy} = \frac{k_x(k_y - \delta_{xy})}{\sum_{u=1}^{n}\sum_{v=1}^{n} k_u(k_v - \delta_{uv})}$$

Loop:

$j \leftarrow j+1$

G-matrix for time $(j-1)\,dt$

$$P \leftarrow P\, e^{dt \cdot G^{(j)}}$$

matrix product

$$r[j] \leftarrow \frac{\mathrm{sum}(P\, C^{(j)})}{\mathrm{sum}(P)}$$

need:
1. way to get $M^{(j)} = M$ at time $(j-1)dt$
   $N^{(j)} = N$ —
2. compute C from N
3. compute G from M, C
4. keep track of mapping (rows/cols of G) $\to xy$

Let

$n \times n$ { M … $M_{\ldots}$

G

n^2

$\mathbb{P}\{X_{\ldots}$

Let f