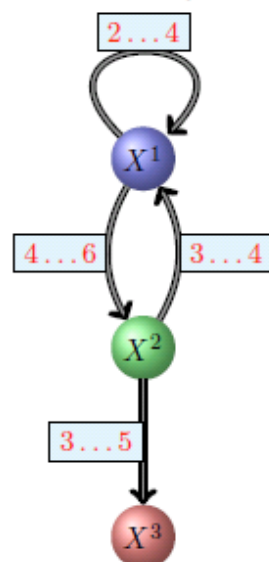
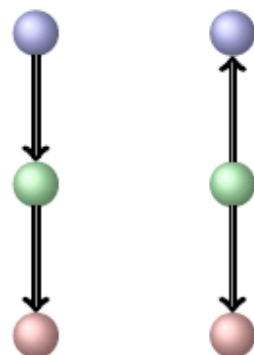


A

Regulatory Motif



B



D

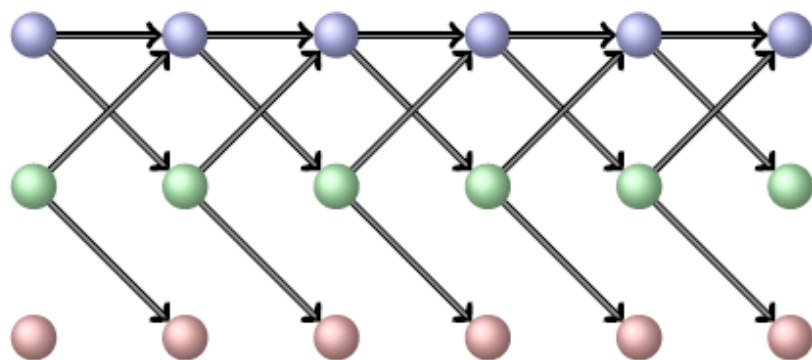
$$\xi^1 = (2, 3, 5, 7)$$

$$\xi^2 = (2, 4, 7)$$

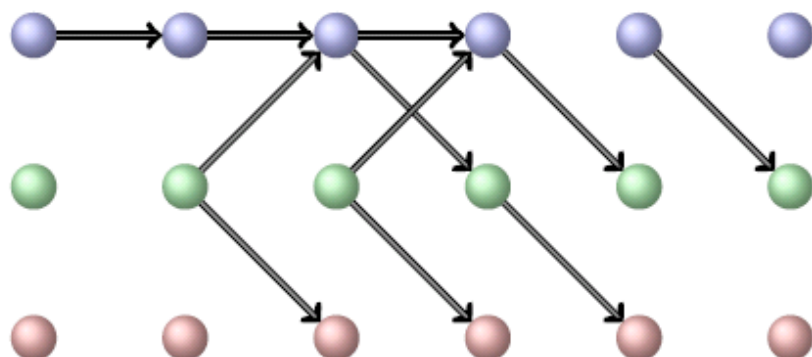
$$\xi^3 = (2, 3, 6, 7)$$

C

Time-homogeneous DBN



Time 1 — 2 — 3 — 4 — 5 — 6 —



Time-varying DBN

E

$$\begin{array}{l}
 X^1(t) = \begin{array}{|c|c|c|c|} \hline b_1^1 + a_1^{11} X^1(t-1) & b_2^1 + a_2^{11} X^1(t-1) + a_2^{12} X^2(t-1) & & b_3^1 \\ \hline \end{array} \\
 X^2(t) = \begin{array}{|c|c|c|c|} \hline & b_2^1 & & b_2^2 + a_2^{21} X^1(t-1) \\ \hline \end{array} \\
 X^3(t) = \begin{array}{|c|c|c|c|} \hline & b_1^3 & & b_2^3 + a_2^{32} X^2(t-1) \\ \hline \end{array}
 \end{array}$$