

- Let  $\{T, Q_i, 1 \leq i \leq k\}$  be a partition of  $\mathcal{N}_n$ .
- The tuple  $(T, Q_i, 1 \leq i \leq k)$  defines the following FCMI on  $X_1, X_2, \dots, X_n$ :  

$$K : X_{Q_1}, X_{Q_2}, \dots, X_{Q_k} \text{ are mutually independent conditioning on } X_T.$$
- Denote  $K$  by  $(T, Q_i, 1 \leq i \leq k)$ .