

Definition 12.13 Let $K = (T, Q_i, 1 \leq i \leq k)$ be an FCMI on X_1, X_2, \dots, X_n . The image of K , denoted by $Im(K)$, is the set of all atoms of \mathcal{F}_n such that

$$Y_j = \begin{cases} \tilde{X}_j & \text{if } j \in W_i \\ \tilde{X}_j^c & \text{if } T \cup \bigcup_{i=1}^k (Q_i - W_i). \end{cases}$$

where $W_i \subseteq Q_i$, $1 \leq i \leq k$, and there exist at least two i such that $W_i \neq \emptyset$.