

$$\begin{array}{lll}
H/I & \leftrightarrow & \mu^* \\
, & \leftrightarrow & \cup \\
; & \leftrightarrow & \cap \\
| & \leftrightarrow & - \quad (A - B = A \cap B^c)
\end{array}$$

- $\mu^*$  is some **signed measure** (set-additive function).

- Examples:

- 1.

$$H(X_1|X_2) = \mu^*(\tilde{X}_1 - \tilde{X}_2)$$

$$H(X_2|X_1) = \mu^*(\tilde{X}_2 - \tilde{X}_1)$$

$$I(X_1; X_2) = \mu^*(\tilde{X}_1 \cap \tilde{X}_2).$$