

- For $n = 3$, the values of μ^* on the nonempty atoms of \mathcal{F}_3 all correspond to Shannon's information measures, except for

$$\mu^*(\tilde{X}_1 \cap \tilde{X}_2 \cap \tilde{X}_3) = I(X_1; X_2; X_3).$$

- We will show that it is possible to construct r.v.'s X_1, X_2 , and X_3 such that $\mu^*(\tilde{X}_1 \cap \tilde{X}_2 \cap \tilde{X}_3) < 0$.