

- Weak typicality: empirical entropy $\approx H(X)$
- Strong typicality: empirical distribution $\sim p(x)$
- Strong typicality \Rightarrow weak typicality (Proposition 6.5)
- Weak typicality $\not\Rightarrow$ strong typicality (to be discussed)
- Both have AEP, but strong typicality has stronger conditional asymptotic properties (Theorem 6.10).
- Strong typicality works only for finite alphabet, i.e., $|\mathcal{X}| < \infty$, but weak typicality works for any countable alphabet.