

# Lecture Notes II – Maximum Likelihood Estimation for Discrete Distributions

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Max Likelihood Principle

ML estimation for arbitrary discrete distributions

Other ML estimation examples

ML estimate as a random variable

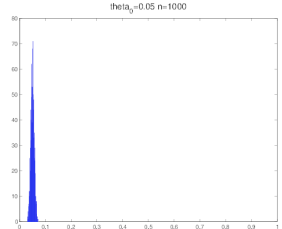
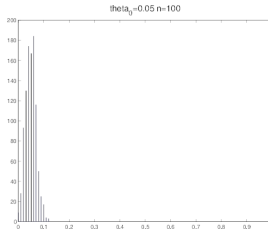
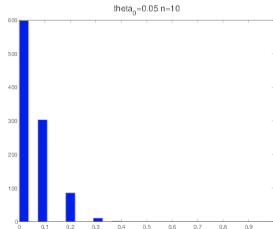
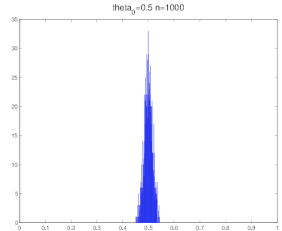
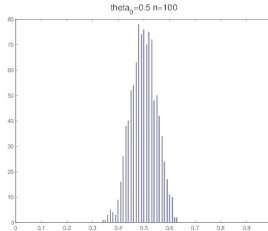
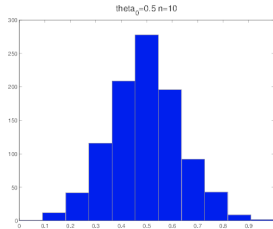
**Reading:** Ch. 4.1, 4.2

# Maximum Likelihood Principle

# ML estimation for arbitrary discrete distributions

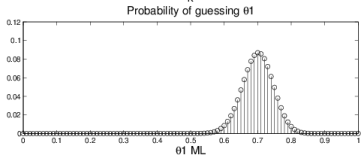
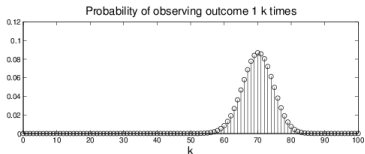
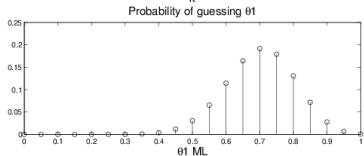
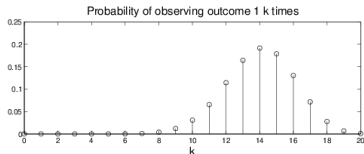
## Other ML estimation examples

# ML estimate as a random variable



# ML estimate as a random variable

$$\binom{n}{n_0 \ n_1 \ \dots \ n_{m-1}} = \frac{n!}{n_0! n_1! \dots n_{m-1}!}$$



## ML estimate as a random variable