

## Lab Nr. 5, Probability and Statistics

### Numerical Characteristics of Random Variables

*Statistics Toolbox: stat*

The means and variances of the following distributions:

Distribution	Notation	Mean $E(X)$	Variance $V(X)$
discrete uniform	$U(m)$		
binomial	$B(n, p)$		
hypergeometric	$H(N, n_1, n)$		
Poisson	$P(\lambda)$		
Pascal (Neg. Bin.)	$NB(n, p)$		
geometric	$G(p)$		
uniform	$U(a, b)$		
normal	$N(\mu, \sigma)$		
gamma	$Ga(a, b)$		
exponential	$Exp(\lambda)$		
beta	$\beta(a, b)$		
Student	$T(n)$		
chi squared	$\chi^2(n)$		
Fisher	$F(m, n)$		