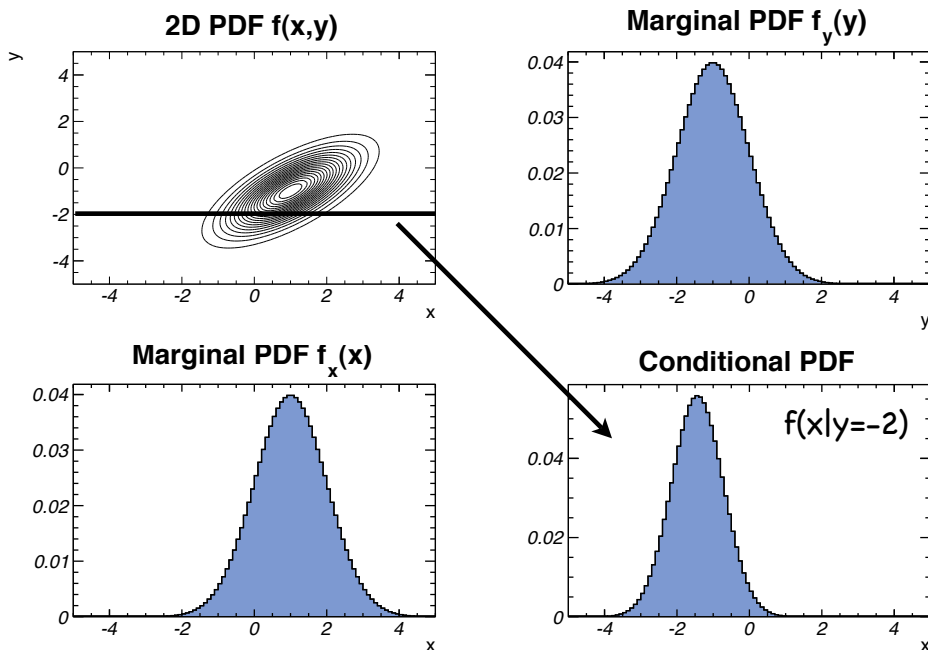


# Statistical Methods of Data Analysis

Ulrich Husemann

Humboldt-Universität zu Berlin  
Winter Semester 2010/2011

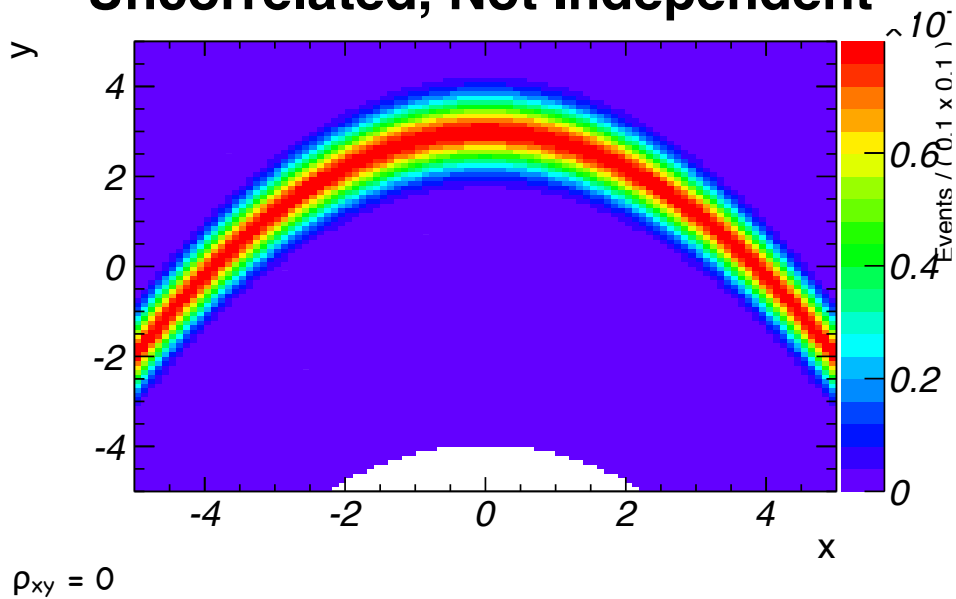
## Two-Dimensional PDFs



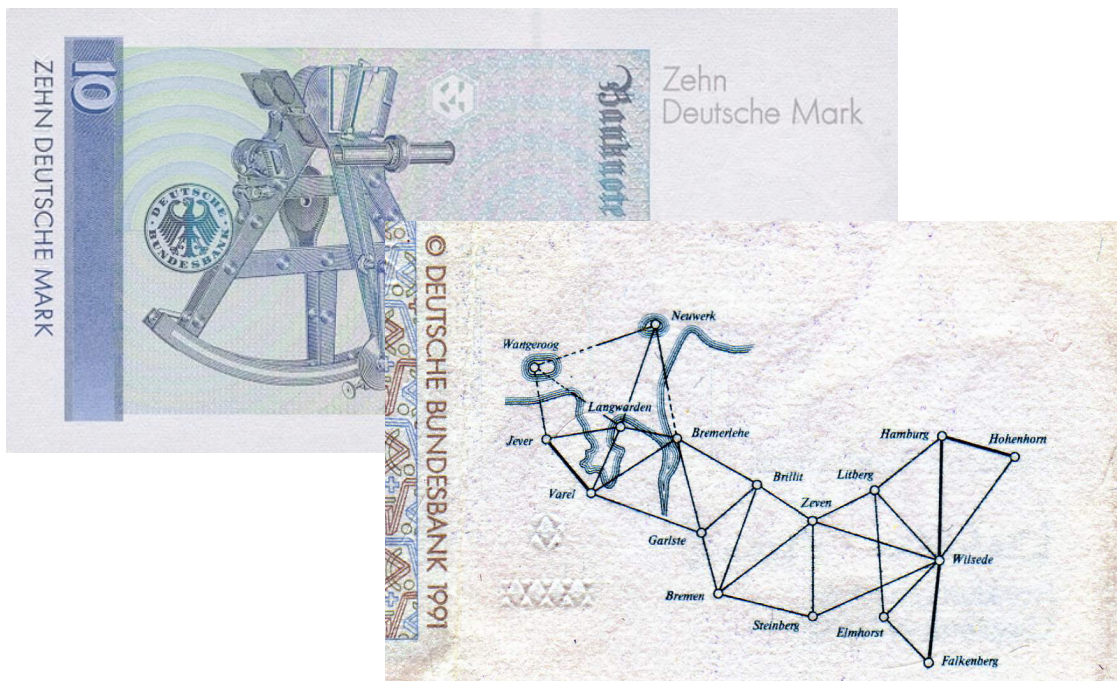
# Uncorrelated, not Independent



## Uncorrelated, Not Independent



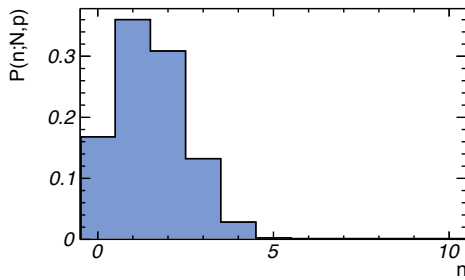
# Gauss as a Surveyor



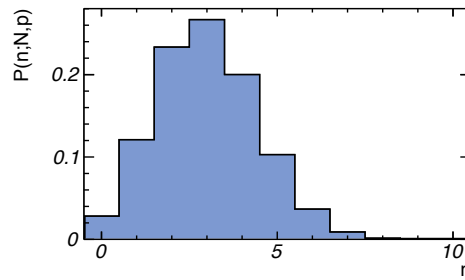
# Binomial Distribution



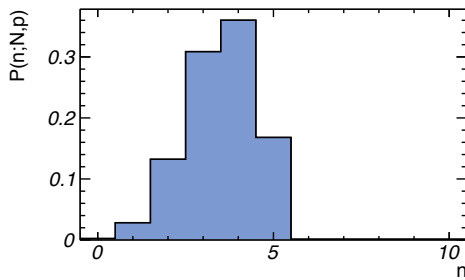
Binomial Probability:  $N = 5, p = 0.3$



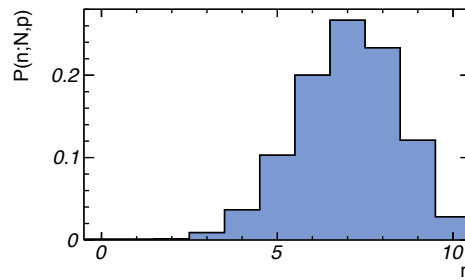
Binomial Probability:  $N = 10, p = 0.3$



Binomial Probability:  $N = 5, p = 0.7$



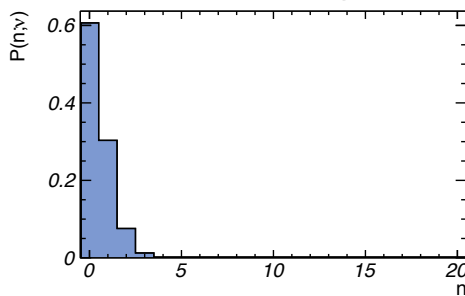
Binomial Probability:  $N = 10, p = 0.7$



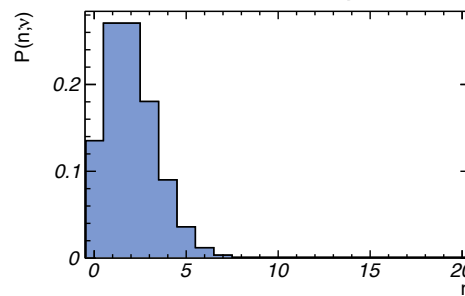
# Poisson Distribution



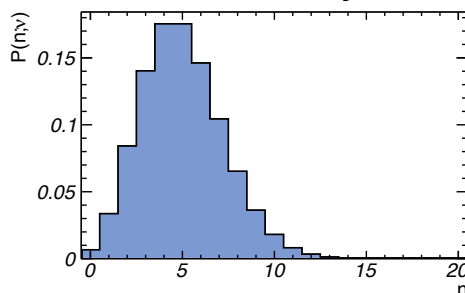
Poisson Probability:  $\nu = 0.5$



Poisson Probability:  $\nu = 2.0$



Poisson Probability:  $\nu = 5.0$



Poisson Probability:  $\nu = 10.0$

