

| probability | |
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| A | |
| absolutely continuous random variables | 绝对连续随机变量 |
| analytic theory of probability | 解析学概率论 |
| antithetic variables | 对偶变量 |
| Archimedes | 阿基米德 |
| Ars Conjectandi | |
| associative law for events | (概率) 事件结合律 |
| axioms of probability | 概率论基本公理 |
| axioms of surprise | |
| B | |
| ballot problem | 选票问题 |
| Banach match problem | 巴拿赫火柴问题 |
| basic principle of counting | 计数基本原理 |
| generalized | (广义) |
| Bayes's formula | 贝叶斯公式 |
| Bernoulli random variables | 伯努利随机变量 |
| Bernoulli trials | 伯努利实验 |
| Bernstein polynomials | 伯恩斯坦多项式 |
| Bertand's paradox | 贝特朗悖论 |
| best prize problem | |
| beta distribution | 贝塔分布 |
| binary symmetric channel | |
| binomial coefficents | 二项式系数 |
| binomial random variables | 二项随机变量 |
| normal approximation | 正态分布逼近 |
| approximation to hypergeometric | 超几何分布逼近 |
| computing its mass function | 计算分布函数 |
| moments of | 矩 (动差) |
| simulation of | 模拟 |
| sums of independent | 独立 二项随机变量 之和 |
| binomial theorem | 二项式定理 |
| birthday problem | 生日问题 |

| probability | |
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| bivariate exponential distribution | 二元指数分布 |
| bivariate normal distribution | 二元正态分布 |
| Bonferroni's inequality | 邦费罗尼不等式 |
| Boole's inequality | 布尔不等式 |
| Box-Muller simulation technique | Box-Muller模拟 |
| Branching process | 分支过程 |
| Buffon's needle problem | 普丰投针问题 |
| C | |
| Cantor distribution | 康托尔分布 |
| Cauchy distribution | 柯西分布 |
| Cauchy - Schwarz inequality | 柯西-施瓦兹不等式 |
| center of gravity | 重心 |
| central limit theorem | 中心极限定理 |
| channel capacity | 信道容量 |
| Chapman-Kolmogorov equation | 查普曼-科尔莫戈罗夫等式 |
| Chebychev's inequality | 切比雪夫不等式 |
| Chernoff bound | 切诺夫界 |
| chi-squared distribution | 卡方分布 |
| density function | 密度函数 |
| relation to gamma distribution | 与伽马函数关系 |
| simulation of | 模拟 |
| coding theory | 编码理论 |
| and entropy | 熵 |
| combination | 组合 |
| combinatorial analysis | 组合分析 |
| combinatorial identities | 组合恒等式 |
| commutative law for events | 事件的交换律 |
| complement of an event | 互补（互余）事件 |
| complete graph | 完全图 |
| computing probabilities by conditioning | 条件法计算概率 |
| concave function | 凹函数 |
| conditional covariance formula | 条件法计算协方差 |
| conditional distribution | 条件概率分布 |

| probability | |
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| continuous case | 连续情况 |
| discrete case | 离散情况 |
| conditional expectation | 条件期望 |
| computing expectations by conditioning | 计算期望 条件法 |
| conditional independence | 条件独立 |
| conditional probability | 条件概率分布 |
| conditional probability density function | 条件概率分布函数 |
| conditional probability mass function | 条件概率质量函数 |
| conditional variance | 条件方差 |
| continuity correction | 连续校正 |
| continuity property of probability | 概率分布连续性 |
| continuous random variable | 连续随机变量 |
| control variate | 控制变量 |
| convex function | 凸函数 |
| convolution | 卷积 |
| correlation | 相关 |
| correlation coefficient | 相关系数 |
| | |
| coupon collecting problems | 赠券筹集问题 |
| covariance | 协方差 |
| cumulative distribution function | 累积分布函数 |
| D | |
| De Moivre-Laplace limit theorem | 棣莫弗-拉普拉斯极限定理 |
| DeMorgan's laws | 德摩根定律 |
| dependent events | 相关事件 |
| dependent random variables | 相关随机变量 |
| discrete random variables | 离散随机变量 |
| discrete uniform random variables | 离散均匀分布随机变量 |
| distribution function | 分布函数 |
| distributive law for events | 事件分配率 |
| dominant genes | 显性基因 |
| double exponential distribution | 双指教分布 |

| probability | |
|---|-------------|
| Laplace distribution | 拉普拉斯分布 |
| doubly stochastic matrix | 双随机矩阵 |
| E | |
| entropy | 熵 |
| ergodic Markov chain | 遍历马尔可夫链 |
| evaluating evidence | |
| event | 事件的交换律 |
| exchangeable random variables | 可交换随机变量 |
| expectation | 期望 |
| exponential random variable | 指数分布随机变量 |
| F | |
| failure rate function | 故障率函数 |
| Fermat's combinatorial identity | 费马组合恒等式 |
| first moment | 第一动差 (就是期望) |
| frequency interpretation of probability | 概率论的频率解释 |
| G | |
| gambler's ruin problem | 赌徒破产问题 |
| game theory | 博弈论 |
| gamma distribution | 伽马分布 |
| gamma function | 伽马函数 |
| Guassian distribution | 高斯分布 (正态分布) |
| genetics | 基因型 |
| geometric random variable | 几何分布随机变量 |
| geometrical probability | 几何分布函数的概率 |
| H | |
| Hamilton path | 哈密顿路径 |
| hazard rate function | 风险率函数 |
| hypergeometric random variables | 超几何分布随机变量 |
| I | |
| importance sampling | 重要性采样 |
| inclusion-exclusion | 容斥 |
| independent events | 独立事件 |
| independent increment | 独立增量过程 |

| probability | |
|-------------------------------------|---------------------|
| independent random variables | (相互) 独立随机变量 |
| indicator random variables | 指标随机变量 |
| information | 信息 |
| interarrival times | 间隔时间 |
| integer solutions of equations | 方程整数解 |
| intersection of event | 事件的交换律 |
| inverse transform method | 逆变换方法 |
| J | |
| Jensen's inequality | 琴生不等式 |
| joint cumulative probability | 联合分布累计概率 |
| joint moment generating function | 联合分布生成函数 |
| joint probability density funciton | 联合分布密度函数 |
| joint probability mass function | 联合分布累计函数 |
| jointly continuous random variables | 联合分布连续随机变量 |
| K | |
| Keno | 基诺 (一种赌博游戏) |
| knockout tournament | 淘汰赛 |
| L | |
| Laplace distribution | 拉普拉斯分布 |
| Laplace's rule of succession | 拉普拉斯平滑定律 |
| law of frequency of errors | 失误频率定律 |
| law of total probability | 全概率定律 |
| law of large numbers | 大数定理 |
| Legendre theorem | 勒让德定理 |
| limit of events | 事件的极限 |
| linear prediction | 线性预测 |
| lognormal distribution | 对数正态分布 |
| M | |
| marginal distribution | 边缘分布 |
| Markov chain | 马可夫链 |
| Markov's inequality | 马可夫不等式 |
| maximum likelihood estimates | 最大似然估计 |
| maximum-minimums identity | 最大值最小值恒等式 (形式像容斥原理) |

| probability | |
|------------------------------------|------------------|
| mean of a random variable | 随机变量的平均值 |
| measurable events | 可测事件 |
| memoryless random variable | 无记忆随机变量 |
| midrange | 中端 |
| minimax theorem | 极大极小定理 |
| mode of random variable | 随机变量的众数 |
| moment generating function | 动差生成函数 |
| moments of a random variable | 随机变量的动差 |
| multinomial theorem | 多项式定理 |
| multiplication rule of probability | 概率的乘积法则 |
| multivariate normal distribution | 多元正态分布 |
| mutually exclusive events | 互斥事件 |
| N | |
| negative binomial random variables | 负二项分布的随机变量 |
| negative hypergeometric random | 负超几何分布 |
| noiseless coding theorem | 无噪声编码定理 |
| noisy coding theorem | 有噪信道编码定理 |
| normal random variable | 正态分布随机变量 |
| null event | 空事件 |
| null set | 空集 |
| O | |
| odds of an event | 一个事件的可能性 |
| order statistics | 顺序统计 |
| P | |
| Parallel system | 并联系统 |
| partition | 分隔 |
| Pascal | 帕斯卡 |
| permutations | 排列 |
| personal view of probability | 概率的个人看法（详见贝叶斯理论） |
| Poisson | 泊松 |
| Poisson paradigm | 泊松范式 |

| probability | |
|--|-----------|
| Poisson process | 泊松过程 |
| Poisson random variable | 泊松变量 |
| poker | 扑克 |
| polar algorithm | 极算法？ |
| Polya's urn model | 波利亚的瓮模型 |
| posterior probability | 后验概率 |
| prior probability | 先验概率 |
| probabilistic method | 概率法 |
| probability of an event | 事件概率 |
| probability density function | 概率分布函数 |
| probability mass function | 概率质量函数 |
| problem of the points | 点数分配问题 |
| Q | |
| quick sort algorithm | 快速排序算法 |
| R | |
| random number | 随机数 |
| random permutation | 随机排列 |
| random sample | 随机样本 |
| random subset | 随机子集 |
| random walk | 随机游走 |
| range of a random sample | 随机样本的值域 |
| Rayleigh density function | 瑞利密度函数 |
| record value | 记录值 |
| reduced sample space | ？ |
| rejection method of simulation | ？ |
| relative frequency definition of probability | 概率的相对频率定义 |
| Riemann zeta function | 黎曼Zeta函数 |
| S | |
| sample mean | 样本均值 |
| sample median | 样本中位数 |
| sample space | 样本空间 |
| sample variance | 样本方差 |
| sampling from a finite population | 有限人口中取样 |

| probability | |
|--|----------------|
| sampling with replacement | 有放回抽样 |
| sequential updating of information | ? |
| serve and rally games | |
| signal to noise ratio | 信号与噪声比 |
| simulation | 模拟 |
| standard deviation | 标准差 |
| inequality | 不等式 |
| standard normal distribution | 标准正态分布 |
| standard normal random variable | 标准正态分布随机变量 |
| stationary increments | 平稳增量 |
| Stirling's approximation | 斯特灵公式 |
| stochastically larger | 随机大？ |
| strong law of large numbers | 大数定律强形式 |
| subjective probability | 主观概率 |
| subset | 子集 |
| superset | 超集 |
| T | |
| distribution function | 分布函数 |
| transition probabilities of a Markov chain | 马尔可夫链的转移概率 |
| trials | 试验 |
| triangular distribution | 三角分布 |
| twin problem | 双胞胎问题 |
| U | |
| uncertainty | 不确定性 |
| uncorrelated random | 不相关随机性 |
| uniform random variable | 均匀分布函数 |
| union of events | 时间的并 |
| unit normal random variable | 单位正太分布变量（就是标准） |
| V | |
| value at risk | 风险价值 |
| variance | 方差 |
| Venn diagrams | 维恩图 |
| von Neumann | 冯·诺伊曼 |

| probability | |
|---------------------------|------------|
| W | |
| weak law of large numbers | 大数定理弱形式 |
| Weibull distribution | 韦伯分布 |
| Weierstrass theorem | 维尔斯特拉斯定理 |
| Y | |
| Yule-Simons distribution | 尤尔 - 西蒙斯分布 |
| Z | |
| zeta-distribution | Zeta-分布 |
| Zipf distribution | 齐普夫分布 |
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