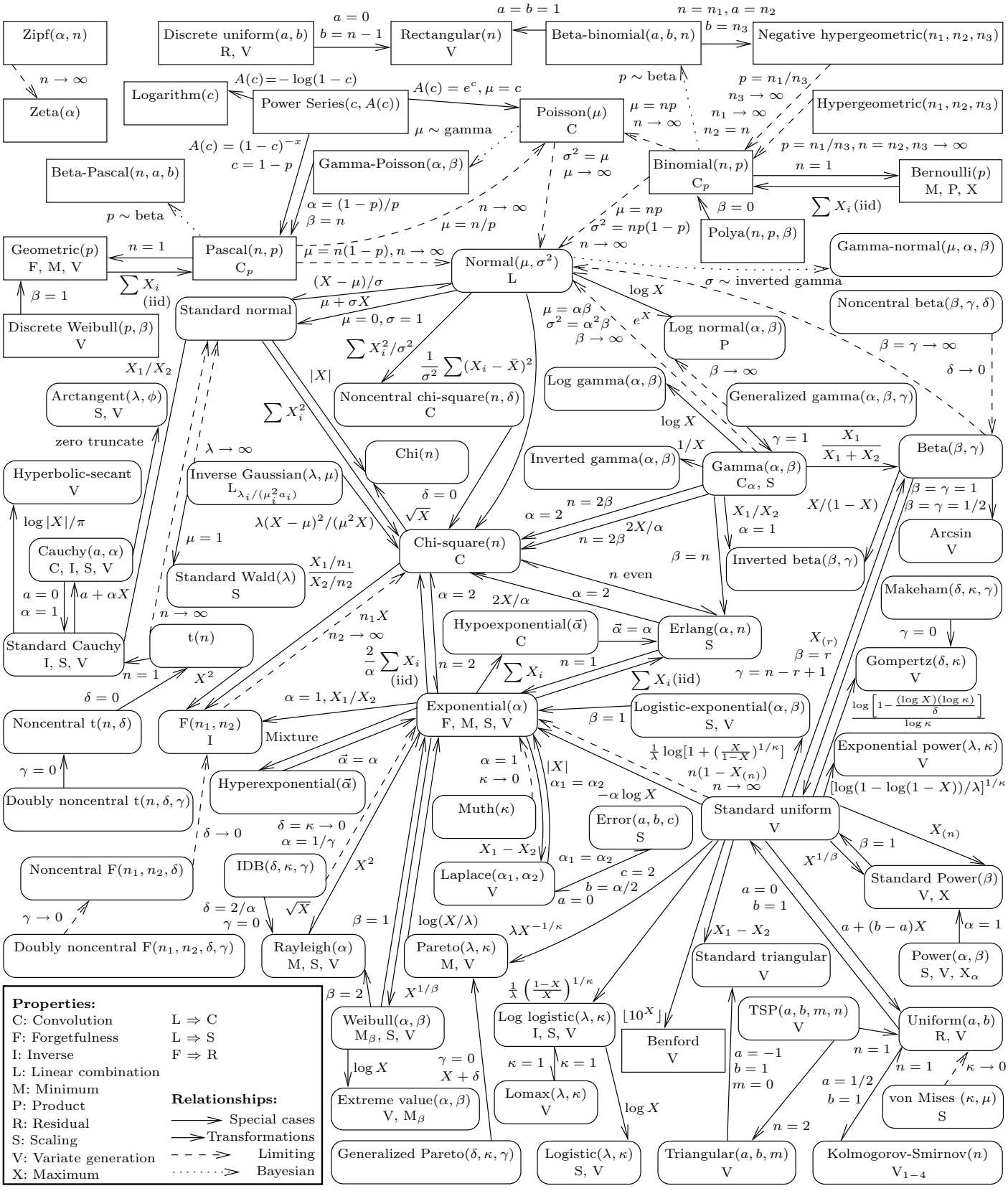

Zipf(α, n)
Discrete uniform(a, b)
R, V
a = 0
b = n − 1
Rectangular(n)
V
a = b = 1
Beta-binomial(a, b, n)
n = n1, a = n2
b = n3
Negative hypergeometric(n1, n2, n3)
n → ∞
Zeta(α)
Logarithm(c)
A(c) = − log(1 − c)
Power Series(c, A(c))
A(c) = e^c, μ = c
Poisson(μ)
C
μ = np
n → ∞
p ∼ beta
p = n1/n3
n3 → ∞
n1 → ∞
n2 = n
Hypergeometric(n1, n2, n3)
μ ∼ gamma
A(c) = (1 − c)^−x
c = 1 − p
Gamma-Poisson(α, β)
σ² = μ
μ → ∞
p = n1/n3, n = n2, n3 → ∞
Beta-Pascal(n, a, b)
Binomial(n, p)
Cp
n = 1
Bernoulli(p)
M, P, X
α = (1 − p)/p
β = n
n → ∞
μ = n/p
p ∼ beta
β = 0
∑ Xi (iid)
Polya(n, p, β)
μ = np
σ² = np(1 − p)
n → ∞
Geometric(p)
F, M, V
n = 1
Pascal(n, p)
Cp
μ = n(1 − p), n → ∞
Normal(μ, σ²)
L
Gamma-normal(μ, α, β)
∑ Xi
(iid)
β = 1
(X − μ)/σ
μ + σX
μ = 0, σ = 1
Standard normal
log X
σ ∼ inverted gamma
Noncentral beta(β, γ, δ)
Discrete Weibull(p, β)
V
μ = αβ
σ² = α²β
β → ∞
e^X
Log normal(α, β)
P
β = γ → ∞
δ → 0
X1/X2
∑ Xi²/σ²
1/σ² ∑(Xi − X̄)²
|X|
β → ∞
Log gamma(α, β)
Generalized gamma(α, β, γ)
Arctangent(λ, φ)
S, V
∑ Xi²
Noncentral chi-square(n, δ)
C
log X
zero truncate
λ → ∞
Chi(n)
1/X
γ = 1
X1/(X1 + X2)
Beta(β, γ)
Hyperbolic-secant
V
Inverse Gaussian(λ, μ)
Lλi/(μi²ai)
Inverted gamma(α, β)
Gamma(α, β)
Cα, S
δ = 0
√X
n = 2β
α = 2
X1/X2
α = 1
β = γ = 1
β = γ = 1/2
X/(1 − X)
log |X|/π
λ(X − μ)²/(μ²X)
2X/α
n = 2β
Arcsin
V
Cauchy(a, α)
C, I, S, V
μ = 1
Chi-square(n)
C
Inverted beta(β, γ)
β = n
n even
Makeham(δ, κ, γ)
Standard Wald(λ)
S
X1/n1
X2/n2
a = 0
α = 1
a + αX
n → ∞
α = 2
2X/α
α = 2
γ = 0
Standard Cauchy
I, S, V
t(n)
n1X
n2 → ∞
Hypoexponential(α⃗)
C
α⃗ = α
Erlang(α, n)
S
X(r)
β = r
γ = n − r + 1
Gompertz(δ, κ)
V
2/α ∑ Xi
(iid)
n = 1
X²
n = 2
∑ Xi
n = 1
∑ Xi (iid)
δ = 0
α = 1, X1/X2
Exponential(α)
F, M, S, V
Logistic-exponential(α, β)
S, V
log[1 − (log X)(log κ)/δ] / log κ
Noncentral t(n, δ)
F(n1, n2)
I
Mixture
β = 1
Exponential power(λ, κ)
V
γ = 0
α⃗ = α
Hyperexponential(α⃗)
α = 1
κ → 0
|X|
α1 = α2
1/λ log[1 + (X/(1 − X))^1/κ]
n(1 − X(n))
n → ∞
[log(1 − log(1 − X))/λ]^1/κ
Doubly noncentral t(n, δ, γ)
Muth(κ)
−α log X
Error(a, b, c)
S
Standard uniform
V
δ → 0
δ = κ → 0
α = 1/γ
X1 − X2
α1 = α2
X(n)
β = 1
X^1/β
Noncentral F(n1, n2, δ)
IDB(δ, κ, γ)
X²
Laplace(α1, α2)
V
c = 2
b = α/2
a = 0
Standard Power(β)
V, X
a = 0
b = 1
δ = 2/α
γ = 0
√X
β = 1
log(X/λ)
λX^−1/κ
Pareto(λ, κ)
M, V
X1 − X2
Standard triangular
V
a + (b − a)X
α = 1
Power(α, β)
S, V, Xα
γ → 0
Doubly noncentral F(n1, n2, δ, γ)
Rayleigh(α)
M, S, V
β = 2
X^1/β
1/λ ((1 − X)/X)^1/κ
⌊10^X⌋
TSP(a, b, m, n)
V
Uniform(a, b)
R, V
Weibull(α, β)
Mβ, S, V
Log logistic(λ, κ)
I, S, V
Benford
V
a = −1
b = 1
m = 0
n = 1
κ → 0
log X
γ = 0
X + δ
κ = 1
κ = 1
a = 1/2
b = 1
Extreme value(α, β)
V, Mβ
Lomax(λ, κ)
V
log X
n = 2
Generalized Pareto(δ, κ, γ)
Logistic(λ, κ)
S, V
Triangular(a, b, m)
V
Kolmogorov-Smirnov(n)
V1−4
von Mises (κ, μ)
S
Properties:
C: Convolution
F: Forgetfulness
I: Inverse
L: Linear combination
M: Minimum
P: Product
R: Residual
S: Scaling
V: Variate generation
X: Maximum
L ⇒ C
L ⇒ S
F ⇒ R
Relationships:
Special cases
Transformations
Limiting
Bayesian