



Note 1: Lines: solid lines (→) = transformations or special cases, dashed lines (→) = asymptotic results, and solid-dotted lines (→) = Bayesian relationships.

Note 2: Self-directed arrows (→) include A: Minimum, B: Maximum, C: Convolution, I: Inverse, L: Linear Combination, P: Product, S: Scaling.

(The following require source random variables: A and B require iid; C, L, and P require independent; A_α, B_β, C_β, require “variational iid”.)

Note 3: ● denotes the “closed-form inverse cdf” property, and ⊗ denotes the “memoryless” property.

Figure 2: Relationships among 80 Distributions (Song, W.-M. T. and Chen, Yi-Chun (2011), Eighty Univariate Distributions and their Relationships Displayed in a Matrix Format, IEEE Transactions on Automatic Control, Vol. 56, No. 8, pp. 1979-1984).