

	$\chi(p)$	$\bar{\chi}(p)$
Empirical	$\frac{a}{a+c}$	$\frac{2 \log(a+c)/n}{\log(a/n)} - 1$
Power law	$\frac{1}{n} \exp\left(\frac{\alpha}{\eta}\right) p^{\frac{1}{\eta}-1}$	$\frac{2 \log(p)}{\log\left(\frac{1}{n} \exp\left(\frac{\alpha}{\eta}\right)\right) + \frac{1}{\eta} \log(p)} - 1$
Gumbel	$\sim 2 - \frac{(2 \log(1-p)^r)^{\frac{1}{r}}}{\log(1-p)} = 2 - 2^{\frac{1}{r}}$ (Coles et al., 1999)	$\frac{2 \log(p)}{\log(2p(1-p)^2)} - 1$
Gaussian	$\bar{F}(1-p, 1-p)/p,$ where $\bar{F}(1-p, 1-p) = Pr(X_1 > x_{1(1-p)},$ $X_2 > x_{2(1-p)}) \sim (1+\rho)^{\frac{3}{2}} (1-\rho)^{\frac{1}{2}} (4\pi)^{-\frac{\rho}{1+\rho}}$ $(-\log(p))^{\frac{\rho}{1+\rho}} p^{\frac{2}{1+\rho}}$ as $p \rightarrow 0$ (Coles et al., 1999)	$\frac{2 \log(p)}{\log(\bar{F}(1-p, 1-p))} - 1$