

... more examples

e.g. *non-extensive* for statistical physics (*Tsallis-type*):

$$\Phi_q^T(P, Q) = \frac{1}{1-q} \sum_{i \in \mathbb{A}} p_i^q (1 - q_i^{1-q}),$$

$$H_q^T(P) = \frac{1}{1-q} \sum_{i \in \mathbb{A}} p_i (p_i^{q-1} - 1),$$

$$D_q^T(P, Q) = \frac{1}{1-q} \sum_{i \in \mathbb{A}} p_i \left(1 - \left(\frac{p_i}{q_i} \right)^{q-1} \right).$$

or aiming at *Renyi entropy- and divergence*:

$$\Phi_q^R = \frac{-1}{1-q} \ln \frac{\sum p_i^q q_i^{1-q}}{\sum p_i^q}$$

$$H_q^R = \frac{1}{1-q} \ln \sum p_i^q$$

$$D_q^R = \frac{-1}{1-q} \ln \sum p_i^q q_i^{1-q}.$$