

Streumaße

| | Population | Stichprobe | Wahrscheinlichkeiten |
|------------------------------|--|--|---|
| Arithmetisches Mittel | $\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$ | | Erwartungswert $E(X) = \sum_{i=1}^k x_i \cdot P(X = x_i)$ |
| Mittlere absolute Abweichung | $\bar{d} = \frac{1}{n} \sum_{i=1}^n x_i - \bar{x} $ | | $MAD = \sum_{i=1}^k x_i - E(X) \cdot P(X = x_i)$ |
| Varianz | $Var = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n}$ | $Var = \frac{\sum_{i=1}^n (x_i - \bar{x})^2}{n - 1}$ | $Var(X) = \sum_{i=1}^k (x_i - E(X))^2 \cdot P(X = x_i)$ |
| Standard-abweichung | $\sigma = \sqrt{Var}$ | $s = \sqrt{Var}$ | $\sigma(X) = \sqrt{Var(X)}$ |
| Variationskoeffizient | $v = \frac{\sigma}{\bar{x}}$ | $v = \frac{s}{\bar{x}}$ | $v = \frac{\sigma(X)}{E(X)}$ |