Covarianza (variabili aleatorie)

$$\mathrm{cov}(X, Y) = E[(X - E[X])(Y - E[Y])] = E[XY] - E[X]E[Y].$$

Proprietà

- $\mathrm{var}(X) = \mathrm{cov}(X, X)$;
- $\mathrm{cov}(aX + bY + c, Z) = a\,\mathrm{cov}(X, Y) + b\,\mathrm{cov}(Y, Z)$;
- $\mathrm{cov}(X, Y) = \mathrm{cov}(Y, X)$;
- $\mathrm{var}(X + Y) = \mathrm{var}(X) + \mathrm{var}(Y) + 2\,\mathrm{cov}(X, Y)$.