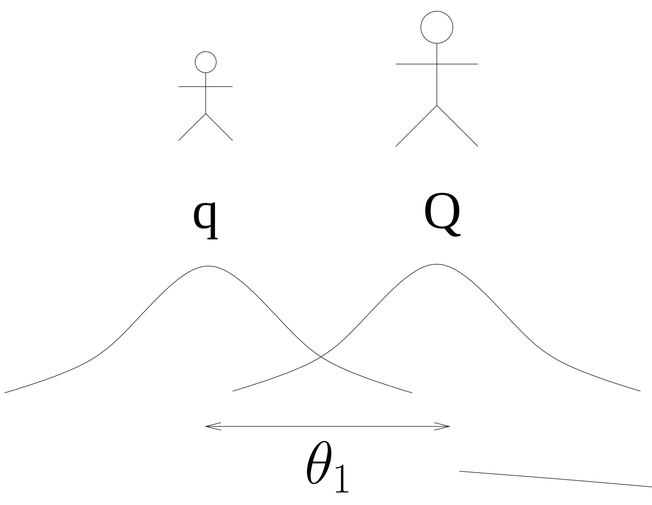
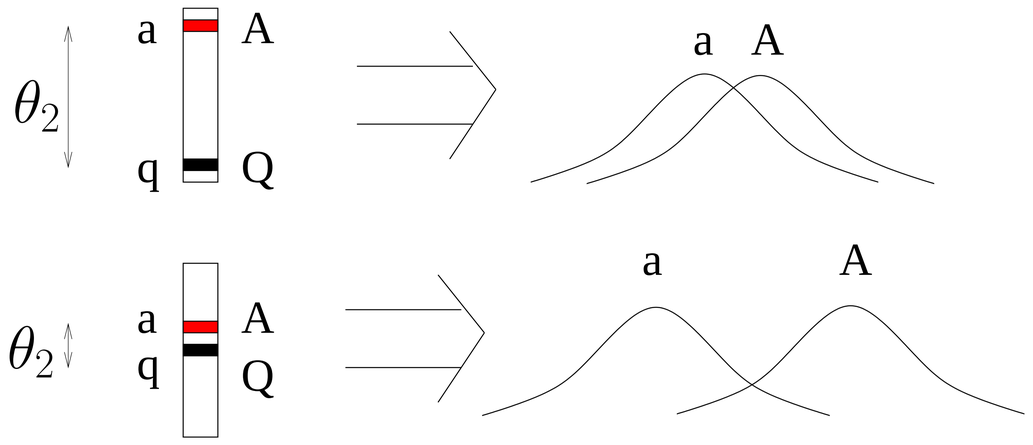
Pooled genotyping for linkage analisis

Types of genes

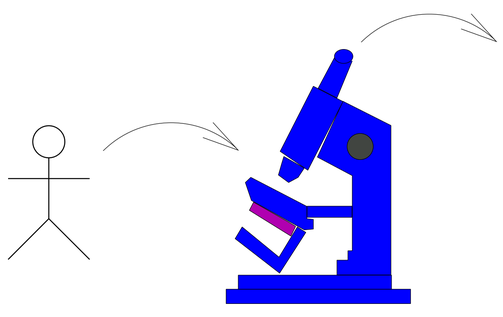
Quantigene:



Linkage



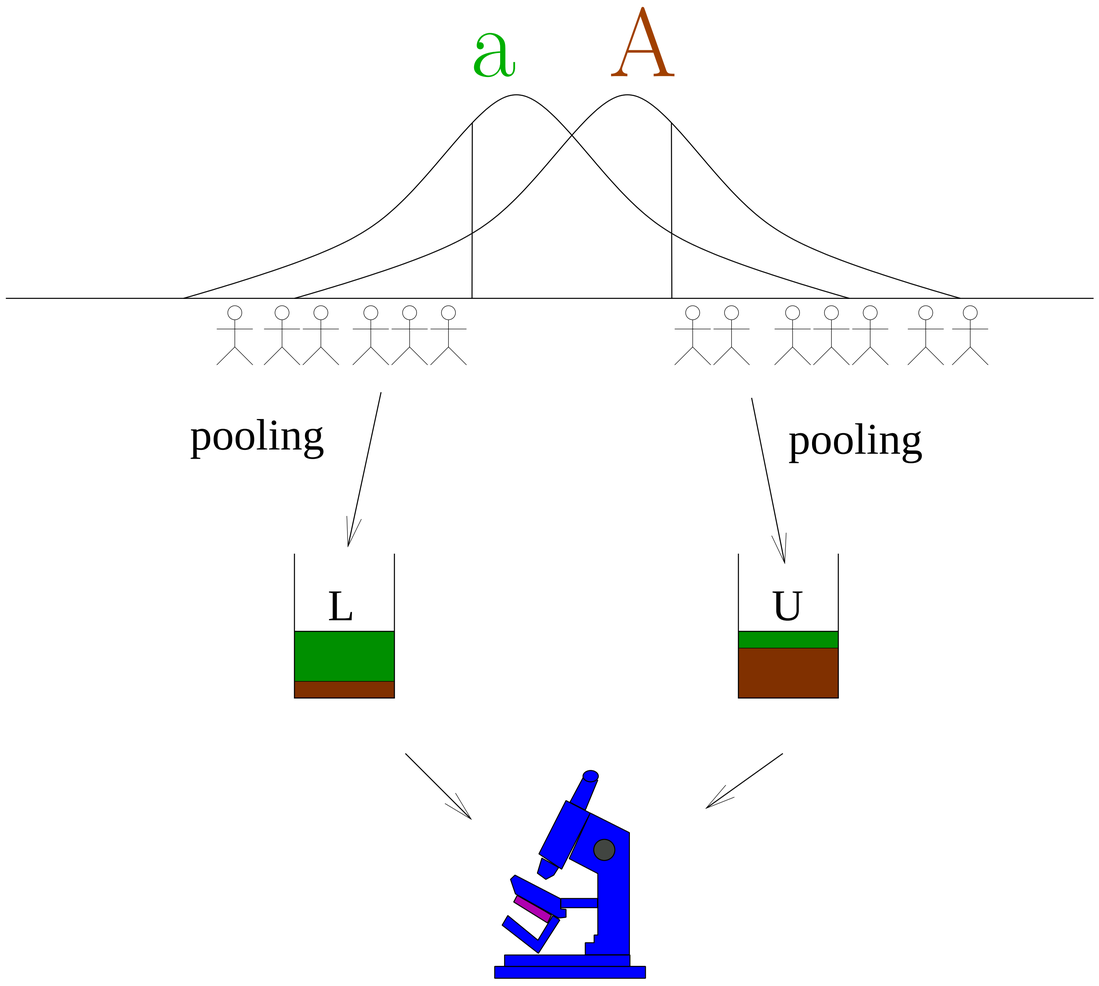
Marker:

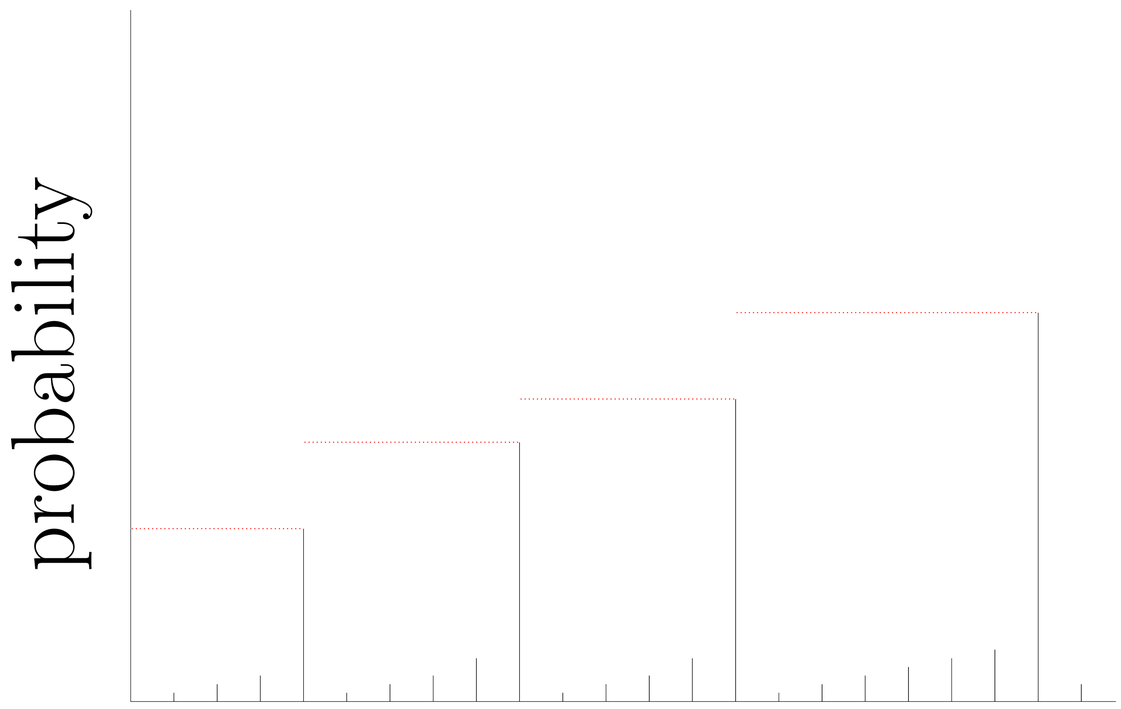


genotype

A, a, B, b, ...

$\theta = (\theta_1, \theta_2)$: effect and location, parameters to estimate





any ordering of genotypes

allele frequencies: n_L^a, n_U^a n_L^A, n_U^A

$$(\vec{n}, \vec{y}) \rightarrow \begin{matrix} (\vec{x}_1, \vec{y}) \\ (\vec{x}_2, \vec{y}) \\ \vdots \\ (\vec{x}_k, \vec{y}) \end{matrix} \rightarrow \begin{matrix} \theta_1 \\ \theta_2 \\ \vdots \\ \theta_k \end{matrix} \rightarrow \hat{\theta}$$