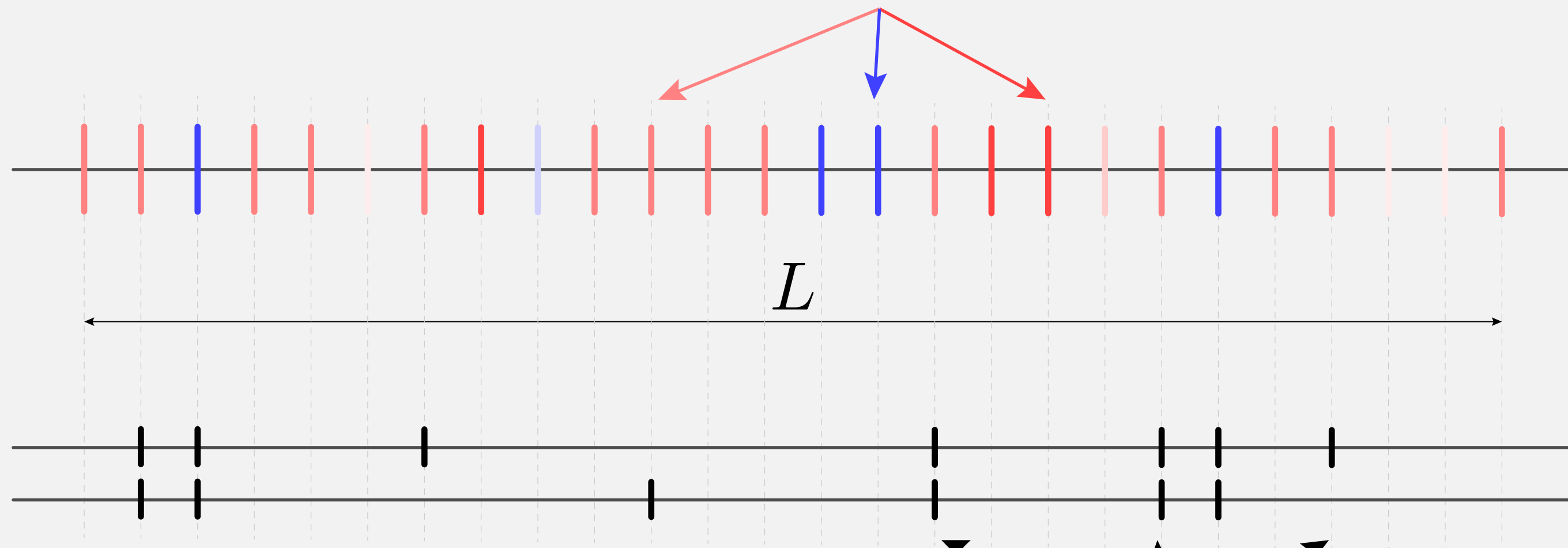


Genotypic effect: $a_l \sim \mathcal{N}(0, a^2)$



$$P_k = \sum_{l=1}^L a_l \times g_{k,l} + \xi_k$$

Phenotype

$\mathcal{N}(0, V_E)$

The diagram shows the relationship between the genotype and the phenotype. The phenotype P_k is calculated as the sum of the genotypic effects a_l multiplied by the alleles $g_{k,l}$ at each locus l , plus a random error term ξ_k . The error term ξ_k is drawn from a normal distribution $\mathcal{N}(0, V_E)$.