$\Rightarrow$ define $e^*_{ij} = d_i + l_i + e_{ij}$

$\Rightarrow$ $y_{ij} = \mu + u_i + e^*_{ij}$

- The breeding value u_i is the sum of the breeding values (BV) over all loci in the genome. What shown and confirmed by genomic selection, is that many loci in the genome have an effect on a quantitative trait and the effects of a single locus on any trait of interest is small.

$\Rightarrow$ $u_i = BV_{i,1} + BV_{i,2} + \ldots + BV_{i,k}$

where BV_{ij} is the breeding value of animal i at locus j in the genome. All these single BV_{ij} at different loci are small

$\Rightarrow$ u_i is a quantity that is a sum of very many small effects. Due to this property the Central Limit Theorem (Zentrale Grenzwertsatz)

any random variable that is compose of a sum of very small co