

□ Prediction of breeding values

$$y = Xb + Zu + e$$

Annotations:
- y : known observations
- X : known from dataset
- Z : known from pedigree
- e : error term

= vectors b , u and e are unknown
where e is not of interest

Goal : Use known parts y, X, Z to
compute estimates \hat{b} for unknown b
and compute prediction \hat{u} for u

- Fixed Least Squares
Rand BLUP

Livestock Breeding & Genomics
Fr 9-12