

# of response variables

## Classical linear models

## Generalized linear models

|    |   |   |
|----|---|---|
| 1  | <p>LM family: <math>E(y)=\mathbf{X}\beta</math>, <math>V(y \mathbf{X})=\sigma^2\mathbf{I}</math></p> <p>Anova, regression, ...</p> <p>Many graphical methods: effect plots, spread-leverage, influence, ...</p> | <p>GLM: <math>E(y)=g^{-1}(\mathbf{X}\beta)</math>, <math>V=V[g^{-1}(\mathbf{X}\beta)]</math></p> <p>poisson, logistic, loglinear, ...</p> <p>Some graphical methods: mosaic plots, 4fold plots, diagnostic plots, ...</p> |
| 2+ | <p>MLM: <math>E(\mathbf{Y})=\mathbf{X}\beta</math>, <math>V(\mathbf{Y} \mathbf{X})=\mathbf{I}\otimes\Sigma</math></p> <p>MANOVA, MMReg, ...</p> <p>Graphical methods: ???</p>                                   | <p>MGLM: ???</p> <p>Graphical methods: ???</p>  |

