



Section 5.2.

Multiple linear regression

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IT approach

(Burnham and Anderson, 2002)

Specify a priori 10-15 models

Calculate differences in AIC

Model averaging

Hypothesis testing

t-test

F-test

Model Selection

Stepwise selection

**Classical model
selection approaches**

AIC, CAIC or BIC

**Do not do model
selection at all!**

Do it only on
Interactions (Bolker,
2008)

Model selection

Four approaches:

1. Keep the model as it is
2. Hypothesis testing
 - t-statistics
 - F statistic
3. Use measure of goodness of fit
 - **AIC** or CAIC. BIC, Adjusted R^2
4. Information criteria
 - Burnham and Anderson (2002)