

## ANOVA assumptions

You can test them on the residuals as in linear regression models or in each group:

- Normality
- Constant Variance
- Independence of observations

If the constant variance assumption is not fulfilled, you can use non parametric ANOVA:

- Welch Test
- Brown-Forythe

One-way ANOVA is robust to normality violations, although, for non normality or extreme assumptions violations, you can use:

- Kruskal Wallis Test (and then, multiple comparisons with Dunn's method)

## Multiple comparisons

There are several methods to control for the family wise error:

- Tukey's HSD method
- Scheffé's method
- Bonferroni's method
- Student-Newman-Keuls' method
- Waller Duncan's method

With non constant variance, you can use:

- Games-Howell's method
- T2 Tamhanes's method