

---

LINEAR REGRESSION, TESTING EQUALITY OF MEANS

---

**linear regression** The file: lin\_regression and equality of means – students.xlsx gives you an example of the treatment of a set of measurement data (Energy gap in German, i.e. the resistance in Ohms, versus temperature (in C)).

Perform an analogous operation for the data in the sheet ‘Platinum’, using:

a) the formulae from the lecture

[http://www.fis.agh.edu.pl/lenda/stat/wykl\\_21\\_lin\\_reg.pdf](http://www.fis.agh.edu.pl/lenda/stat/wykl_21_lin_reg.pdf)

b) ‘linear regression’ option in the ‘Data analysis’ excel-pack.

**equality of means** The same file: lin\_regression and equality of means – students.xlsx contains data of measuring reaction times for two groups of students. Test the hypothesis about equality of the means using:

a) the formulae from the lecture

[http://www.fis.agh.edu.pl/lenda/stat/wykl\\_17\\_hypo\\_eqilty\\_means.pdf](http://www.fis.agh.edu.pl/lenda/stat/wykl_17_hypo_eqilty_means.pdf)

b) ‘equality of means’ option in the ‘Data analysis’ excel-pack.