



# Curve Fitting in GNUPLOT

IKN

# Take a look to the data

*data5.dat*

# porosity grain\_size

14.482 0.279

9.245 0.247

14.992 0.282

12.320 0.264

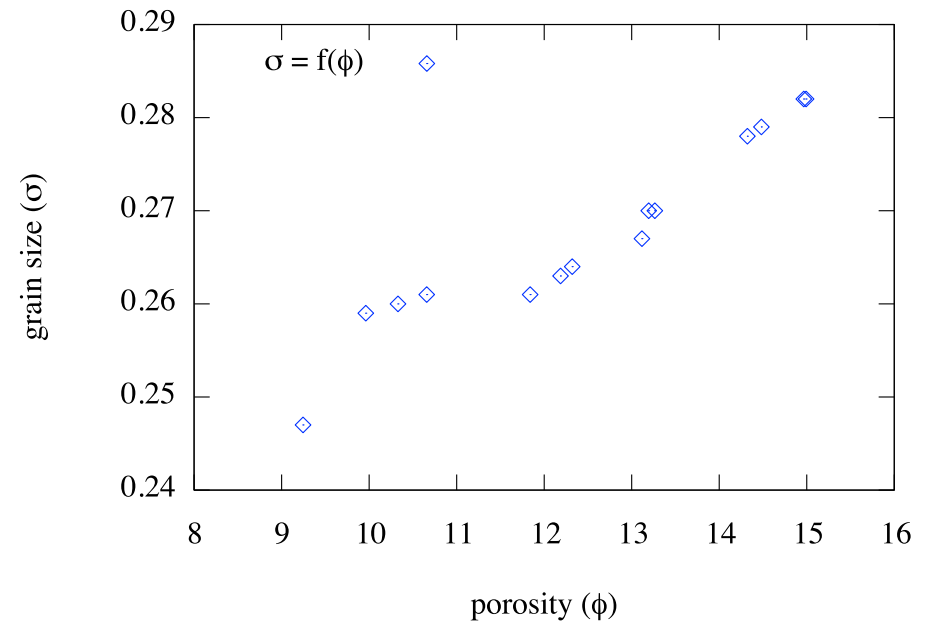
14.322 0.278

13.264 0.270

11.840 0.261

# How to write a symbol in gnuplot label?

- `set xlabel "porosity ({/Symbol f})"`
- `set ylabel "grain size ({/Symbol s})"`



# Symbol text representation

a	$\alpha$	k	$\kappa$	r	$\rho$
b	$\beta$	l	$\lambda$	s	$\sigma$
c	$\chi$	m	$\mu$	t	$\tau$
d	$\delta$	n	$\nu$	u	$\upsilon$
e	$\epsilon$	o	$\omicron$	v	$\varpi$
f	$\phi$	p	$\pi$	w	$\omega$
g	$\gamma$	q	$\theta$	x	$\xi$
h	$\eta$			y	$\psi$
i	$\iota$			z	$\zeta$
j	$\varphi$				

# How to fit a data?

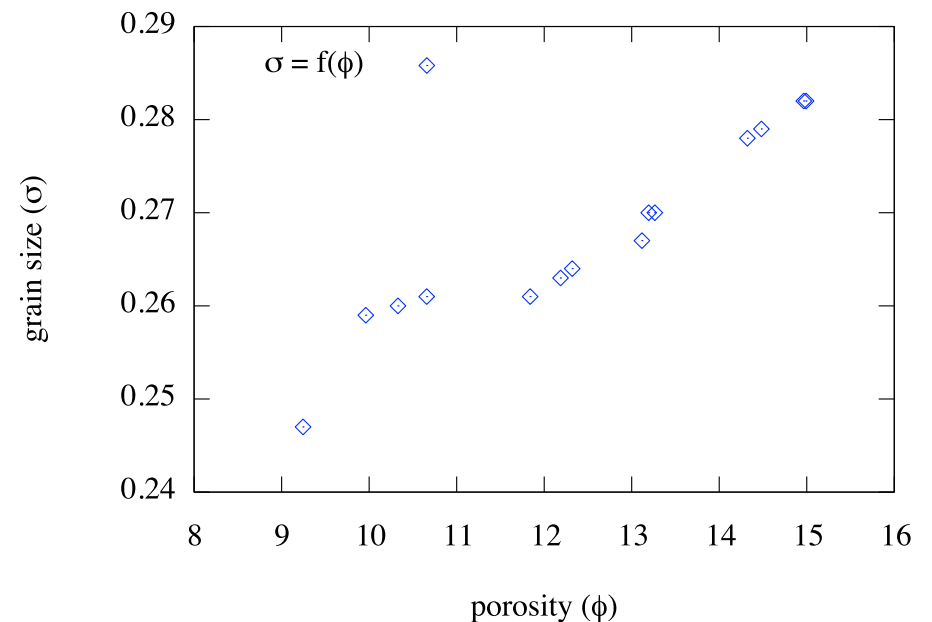
- We approximate the data in the figure by using simple linear equation:  **$y = ax + b$**

`a = 0.1 // optional`

`b = 0.1 // optional`

`f(x) = a*x + b`

`fit f(x) "data5.dat" using 1:2 via a, b`



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