```
from numpy import sqrt,sin, pi, exp, linspace, load
def gaussian(x, amp, cen, wid):
   return amp * exp(-(x-cen)**2 /wid)
def funciones(x,amp1, cen1, wid1, amp2, cen2, wid2, a, b):
    return amp1 * exp(-(x-cen1)**2 /wid1) + amp2 * exp(-(x-cen2)**2 /wid2) + a + b*x

x=load("x_spectra.npy")
y=load("y_spectra.npy")
from scipy.optimize import curve_fit
init_vals = [ 1, 10 , 1, 1, 30, 1, -1, 120 ]     # for [amp1, cen1, wid1, amp1, cen1,
wid1,a,b]
best_vals, covar = curve_fit(funciones, x, y, p0=init_vals)
print best_vals
import matplotlib.pyplot as plt
plt.scatter(x, y)
plt.plot(linspace(-20,120,1200),funciones(linspace(-20,120,1200),best_vals[0],best_vals
[1],best_vals[2],best_vals[3],best_vals[4],best_vals[5],best_vals[6],best_vals[7]),"r-")
plt.show()
```