

TGraph, TGraphErrors, handling a canvas

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TGraph

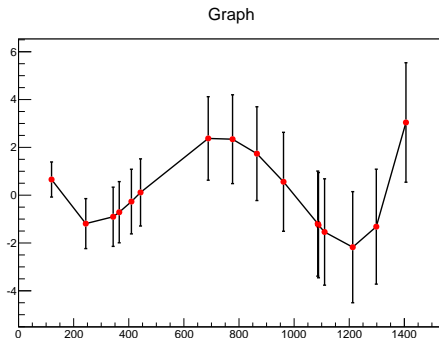
The Graph class (TGraph):

- for plotting and analyzing 2-dimensional data (X,Y),
- contains a set of N distinct points (X_i , Y_i) $i = 0, \dots N-1$. - can be constructed from a set of x,y arrays:

```
1 double x[] = { 1, 2, 3, 4, 5 };  
2 double y[] = { 0.5, 2., 3., 3.2, 4.7 };  
3 TGraph *g = new TGraph(5, x, y);
```

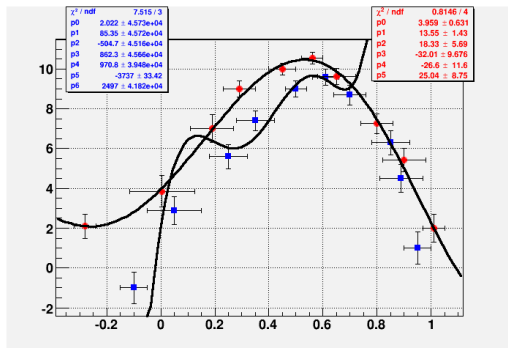
Types of Graphs

- TGraph: (x,y) datapoints.
- TGraphErrors: (x,y) data points with error bars (σ_x, σ_y).
- TGraphAsymmErrors: (x,y) data points with asymmetric error bars $[(\sigma_{-x}, \sigma_{+x}), (\sigma_{-y}, \sigma_{+y})]$.



TMultiGraph

TMultiGraph allows for plotting multiple graphs on the same canvas:
<http://root.cern.ch/root/html/TMultiGraph.html>



Homework

Read the description and examples of use for graph classes:

<http://root.cern.ch/root/html/TGraph.html>

<http://root.cern.ch/root/html/TGraphErrors.html>

<http://root.cern.ch/root/html/TMultiGraph.html>

Complete the homework posted on sakai.