

Introduction of digitization software GDgraph

Workshop on EXFOR Compilation (Vienna)

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China Nuclear Data Center
China Institute of Atomic Energy (CIAE)

Oct. 9, 2014



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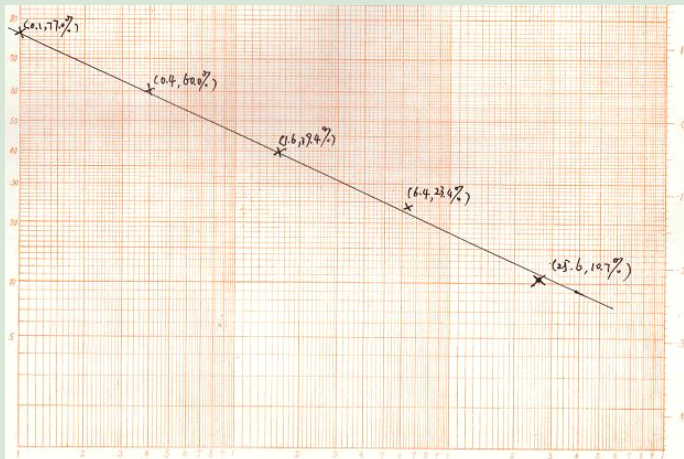
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Short History

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1 Requirements from evaluation & measurement



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- 4 Version-5.0, Windows, Chinese & English
- 5 Software:

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https://www-nds.iaea.org/ndc/ndc_sft

<http://www.nuclear.cnpc.cn/gdgraph>

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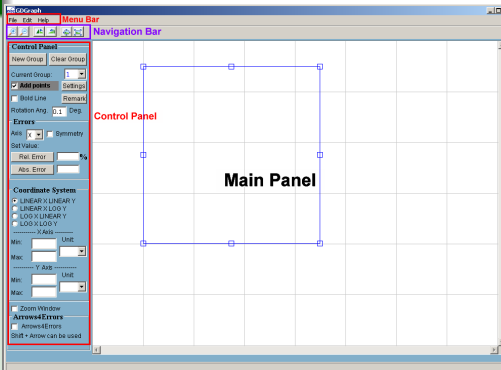
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GDgraph: A graph digitizing software

Main Features

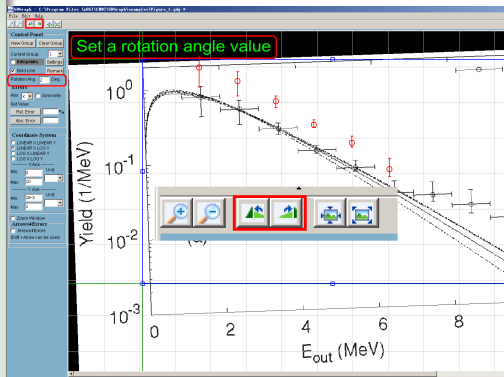
- 1 Update at 2013, Perl
- 2 Chn→Chn&Eng
- 3 GUI: Dialogue → Single Doc. Interface
- 4 Support BMP, JPEG, PNG, GIF ...
- 5 Load or Copy an image from clipboard



GDgraph: A graph digitizing software

Main Features

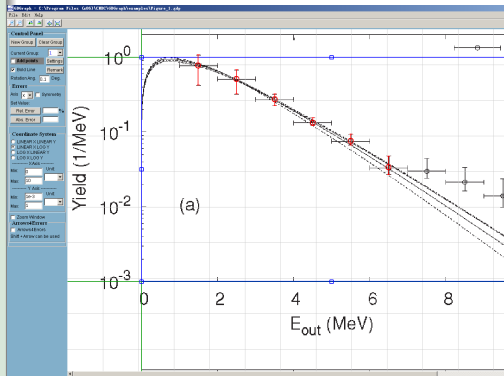
- 7 Image: Rotate, Zoom in/out, Auto fit to GUI, Revert
- 8 Set X/Y axis: type, scale, unit
- 9 Set X/Y error: symmetry/asymmetry; abs./relative(%)
- 10 Use shortcut keys to digitize error



GDgraph: A graph digitizing software

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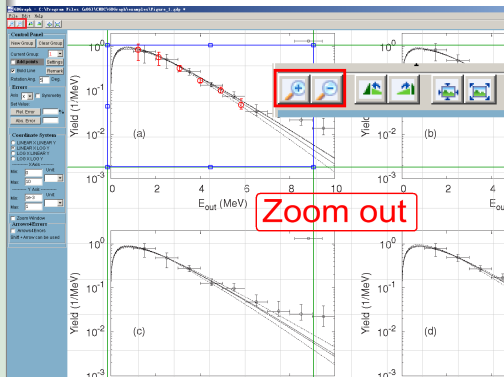
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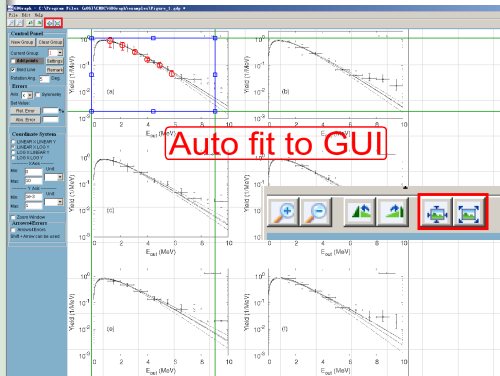
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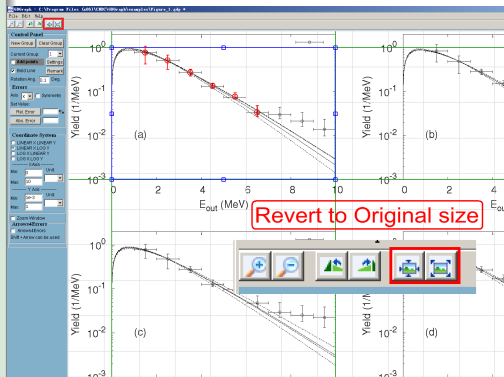
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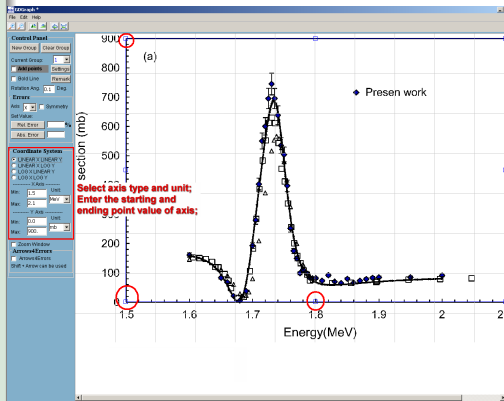
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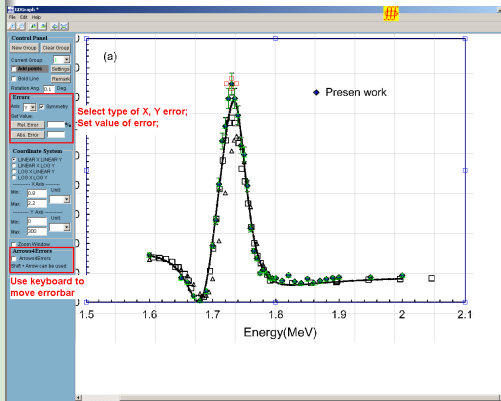
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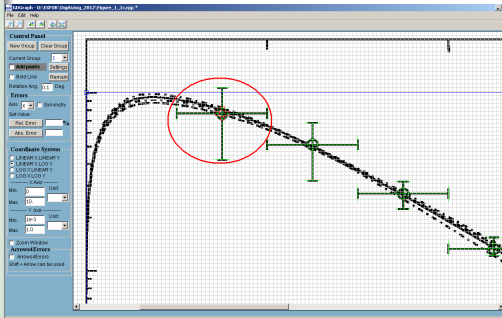
12 Use "Pageup" & "Pagedown" to select Pre. or Next point

13 Magnifying Glass Function

14 Import Data Function

15 Project(*.gdp) & Remarks Function

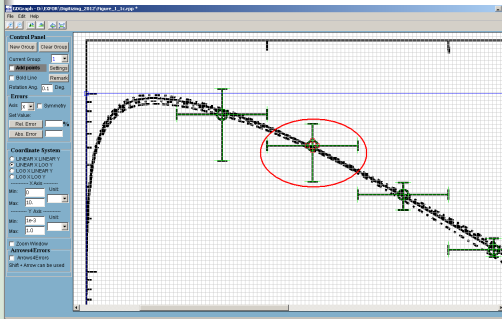
16 Setting Function



GDgraph: A graph digitizing software

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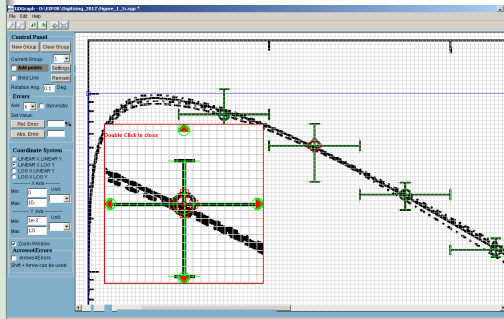
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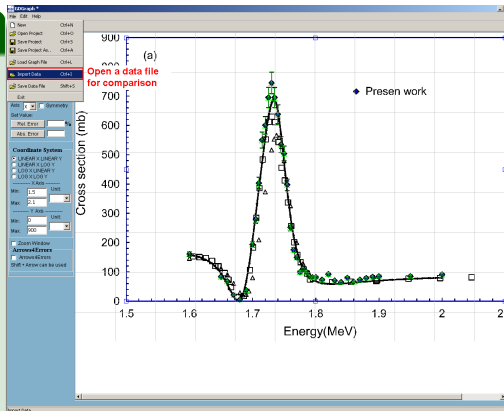
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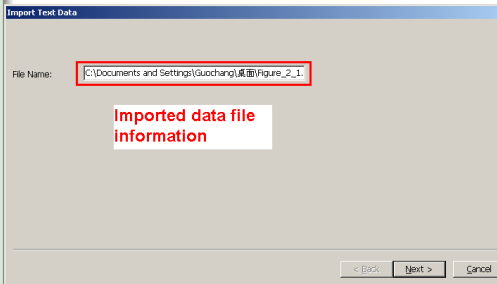
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Import Text Data

Control Label: put the label on the first of the line. **Set different labels to separate different contents**

Data Label: Title Label:

Text Label: all lines after this label will be discard until data label is found.

Contents: revised directly

```

1 1 #####group 1 ##### (39 points) #####
2 1 # X (MeV) Y (nb) dY+ dY- dX- dX+
3
4 1.599985e+000 1.612304e+002 7.883212e+000 7.883212e+000 0.000000e+000 0.00
5 1.650022e+000 8.314911e+001 4.129301e+000 4.129301e+000 0.000000e+000 0.00
6 1.660046e+000 6.794578e+001 3.941606e+000 3.753910e+000 0.000000e+000 0.00
7 1.669984e+000 2.102190e+001 0.000000e+000 0.000000e+000 0.000000e+000 0.00
8 1.680009e+000 6.193952e+000 0.000000e+000 0.000000e+000 0.000000e+000 0.00
9 1.690033e+000 3.791449e+001 0.000000e+000 0.000000e+000 0.000000e+000 0.00
10 1.699971e+000 1.933264e+002 9.384776e+000 9.760167e+000 0.000000e+000 0.00
  
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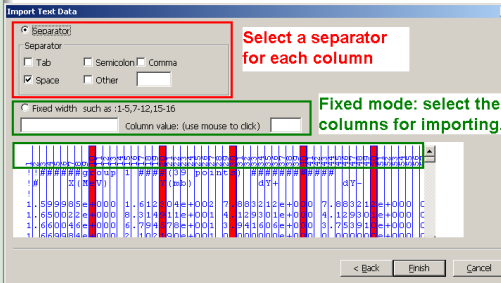
Data content panel

< Back Next > Cancel

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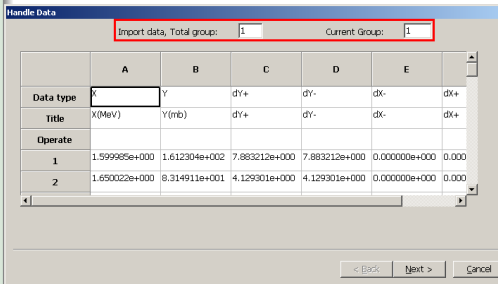
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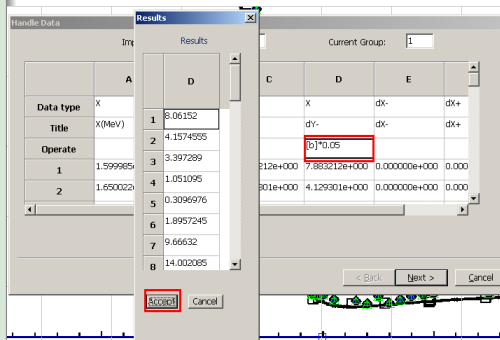
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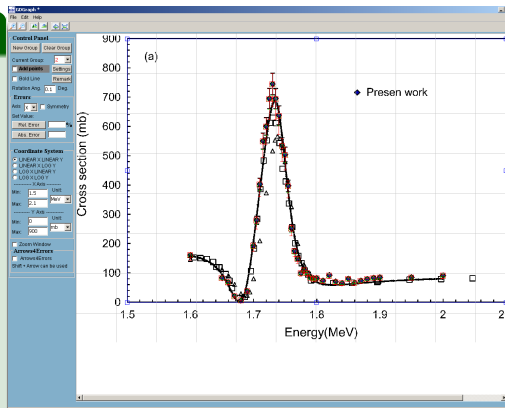
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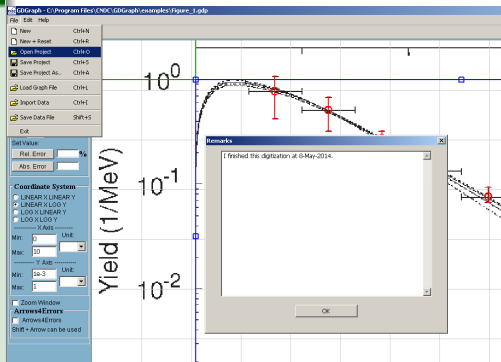
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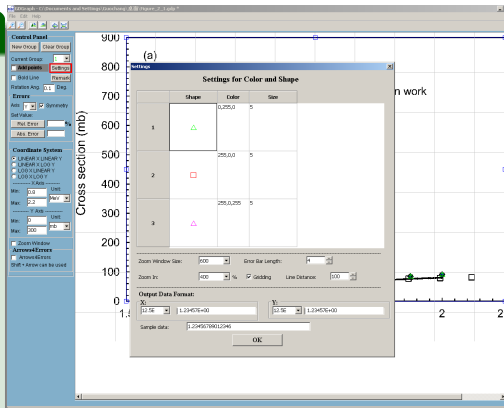
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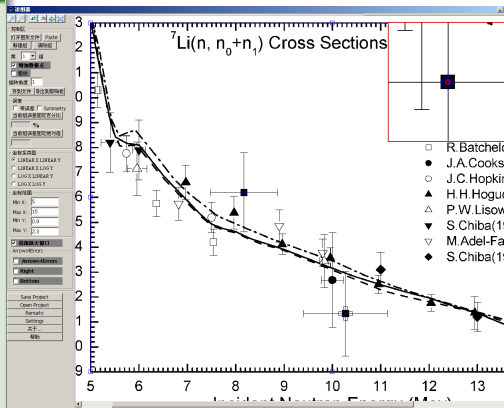
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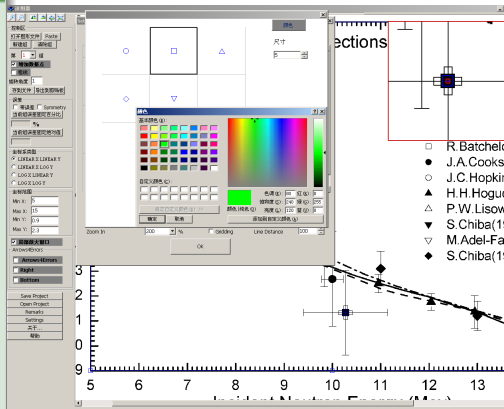
- 1 Point symbol, color, size
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- 6 Output data format



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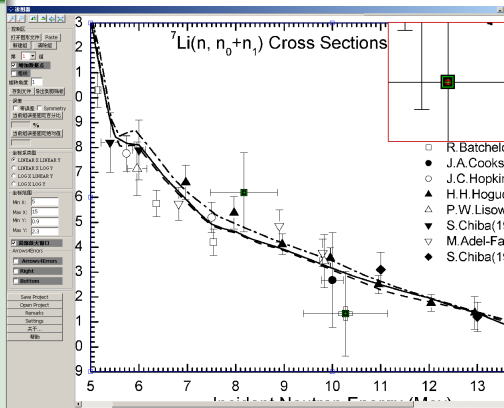
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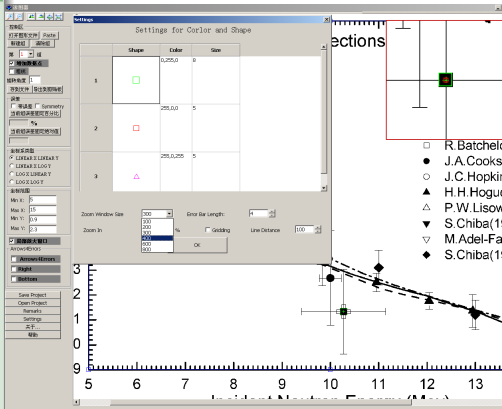
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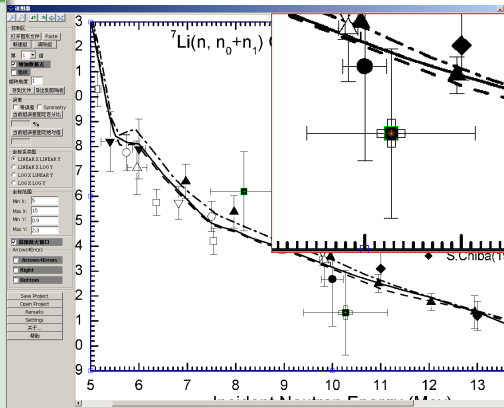
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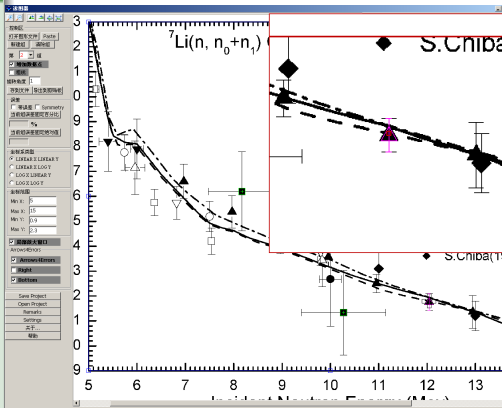
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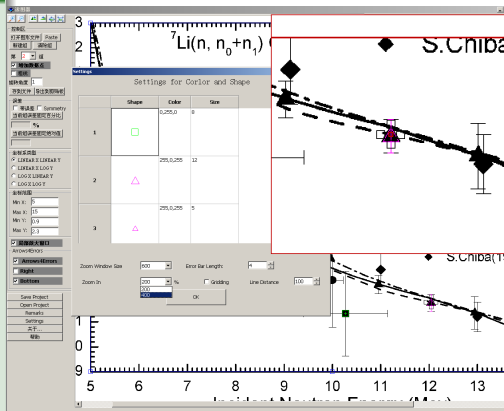
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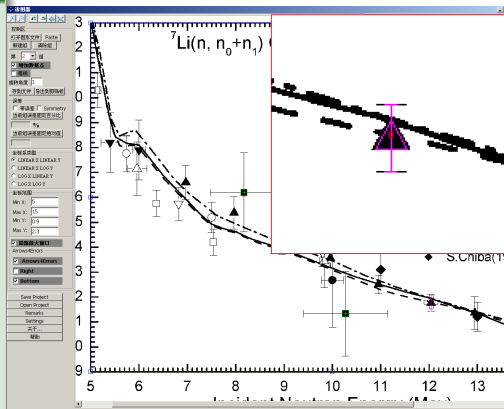
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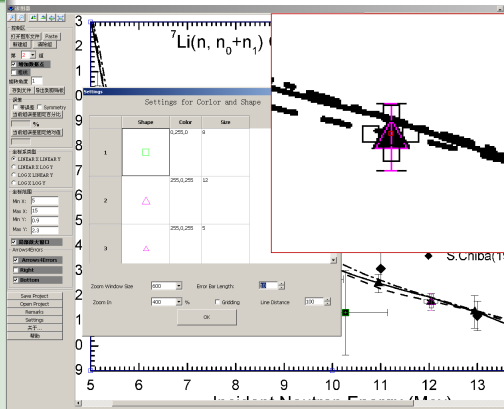
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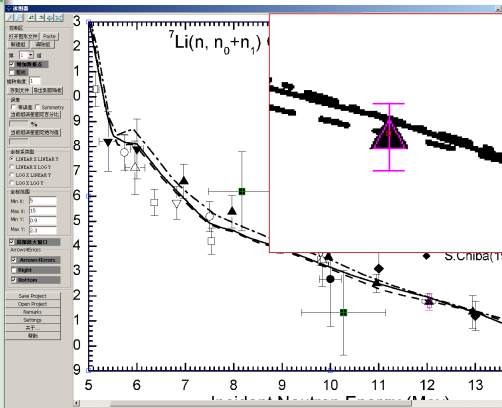
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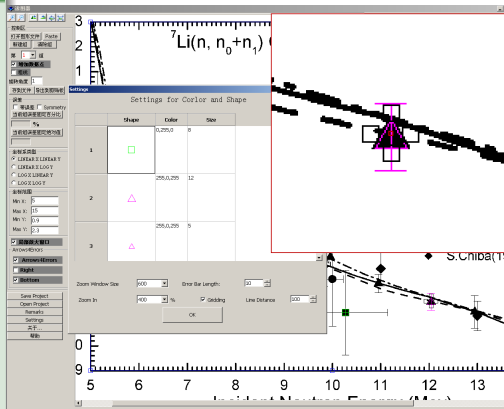
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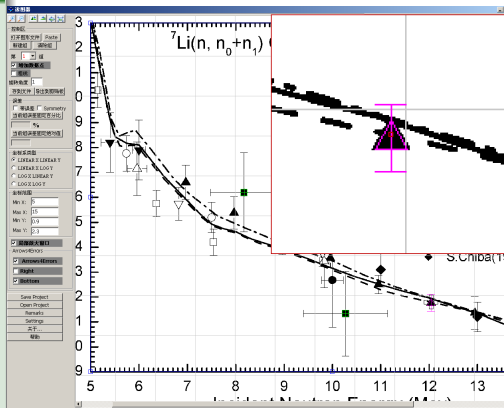
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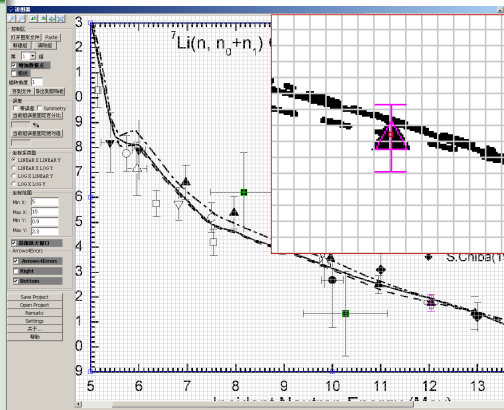
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- ⑥ **Output data format**

Settings

Settings for Color and Shape

Group	Shape	Color	Size
1		0,255,0	5
2		255,0,0	5
3		255,0,255	5

Zoom Window Size: Error Bar Length:

Zoom In: % Gridding Line Distance:

Output Data Format:

X: Y: [Data format](#)

Sample data: [output example](#)

OK

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Summary

- 1 Requirements from evaluation and measurement for developing digitization software
- 2 GDgraph: a software is developed for digitization since 1997
- 3 Present version is fit for digitization requirements
- 4 Some bugs and functions should be developed in future such as symbols, automatic searching axis, ...
- 5 Adopt good characters and functions from other softwares
- 6 Try to develop a Linux version

Thank you for your
attention!

Welcom to China!



