JDOOCS

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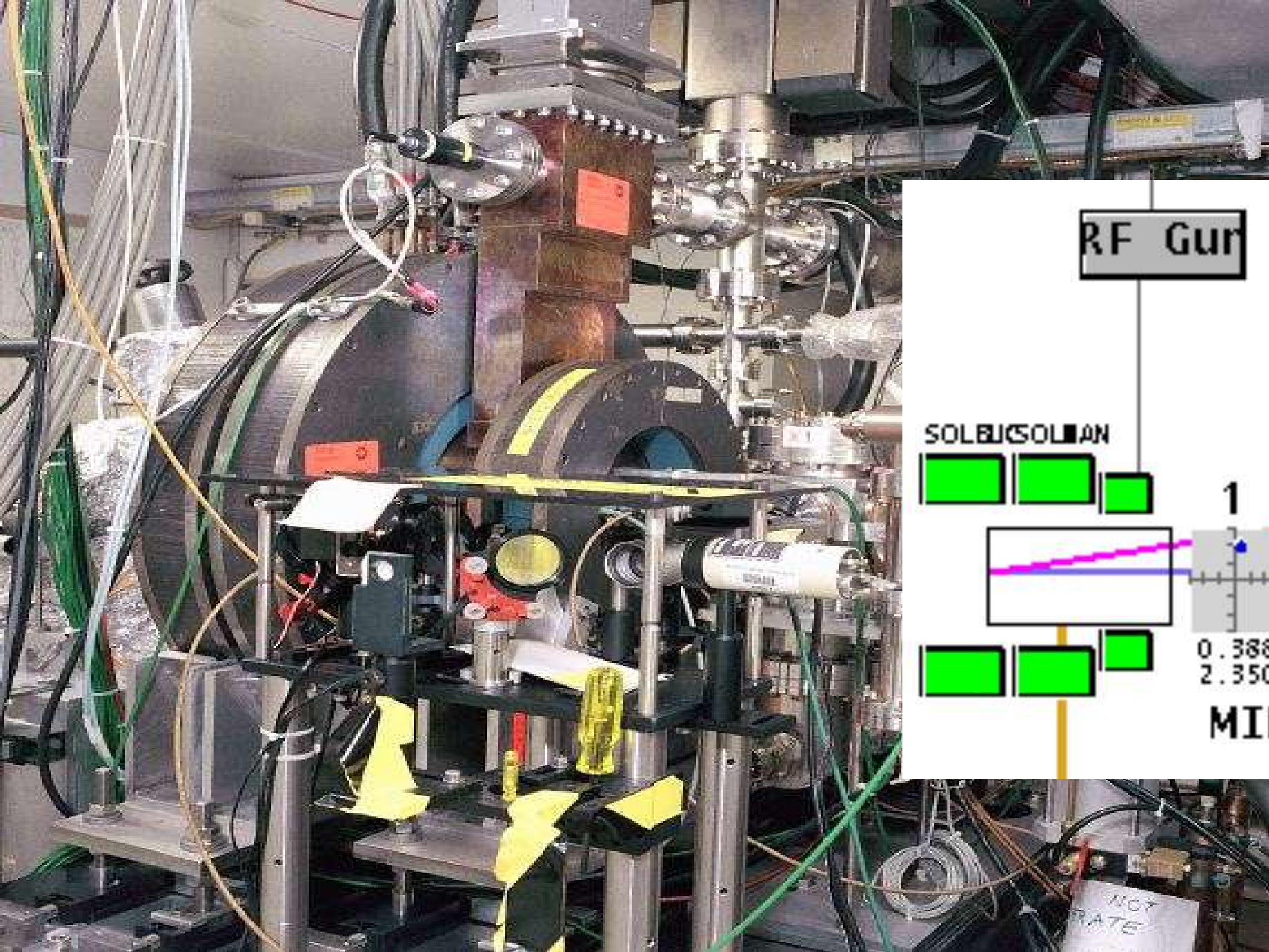
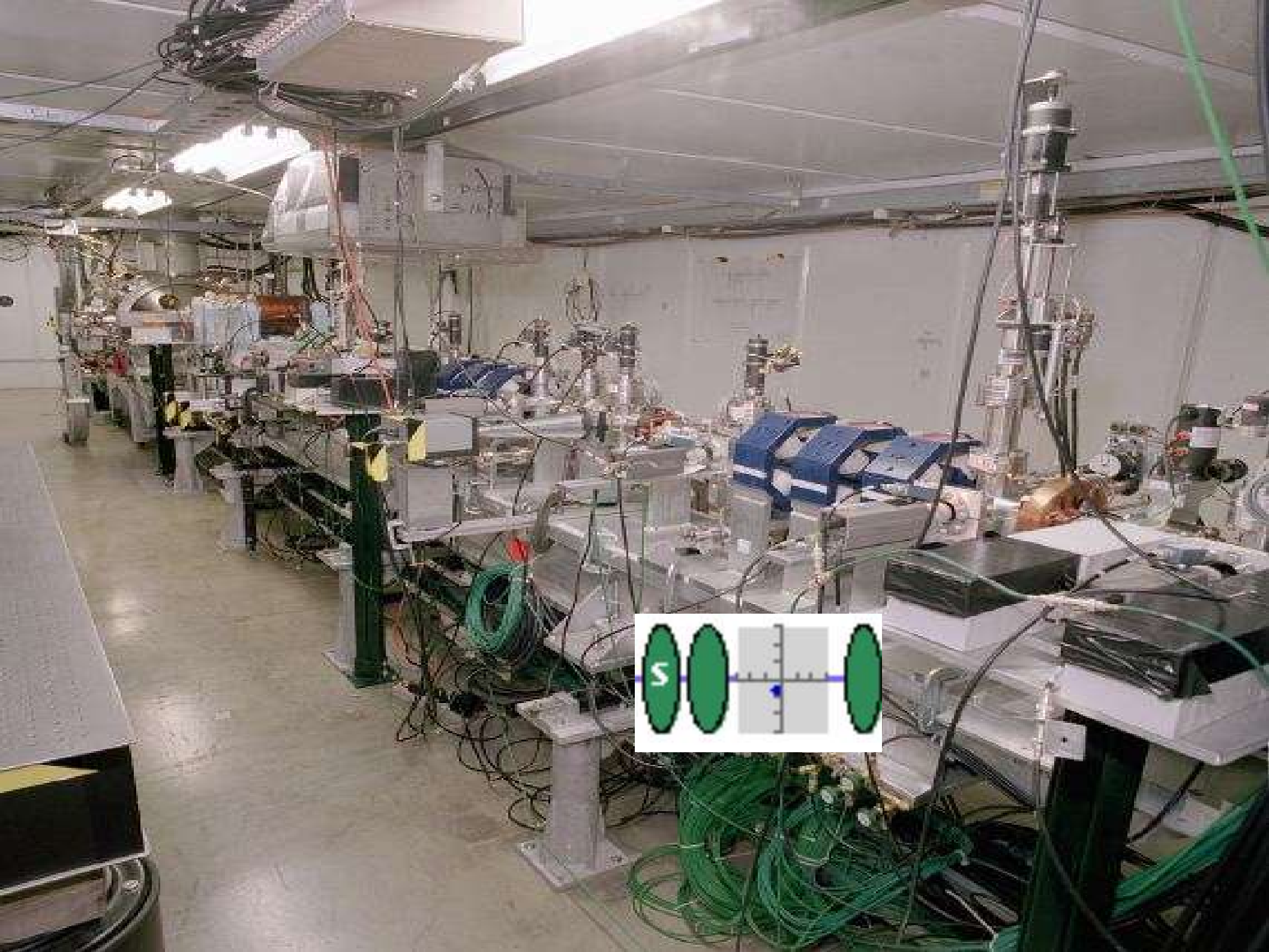
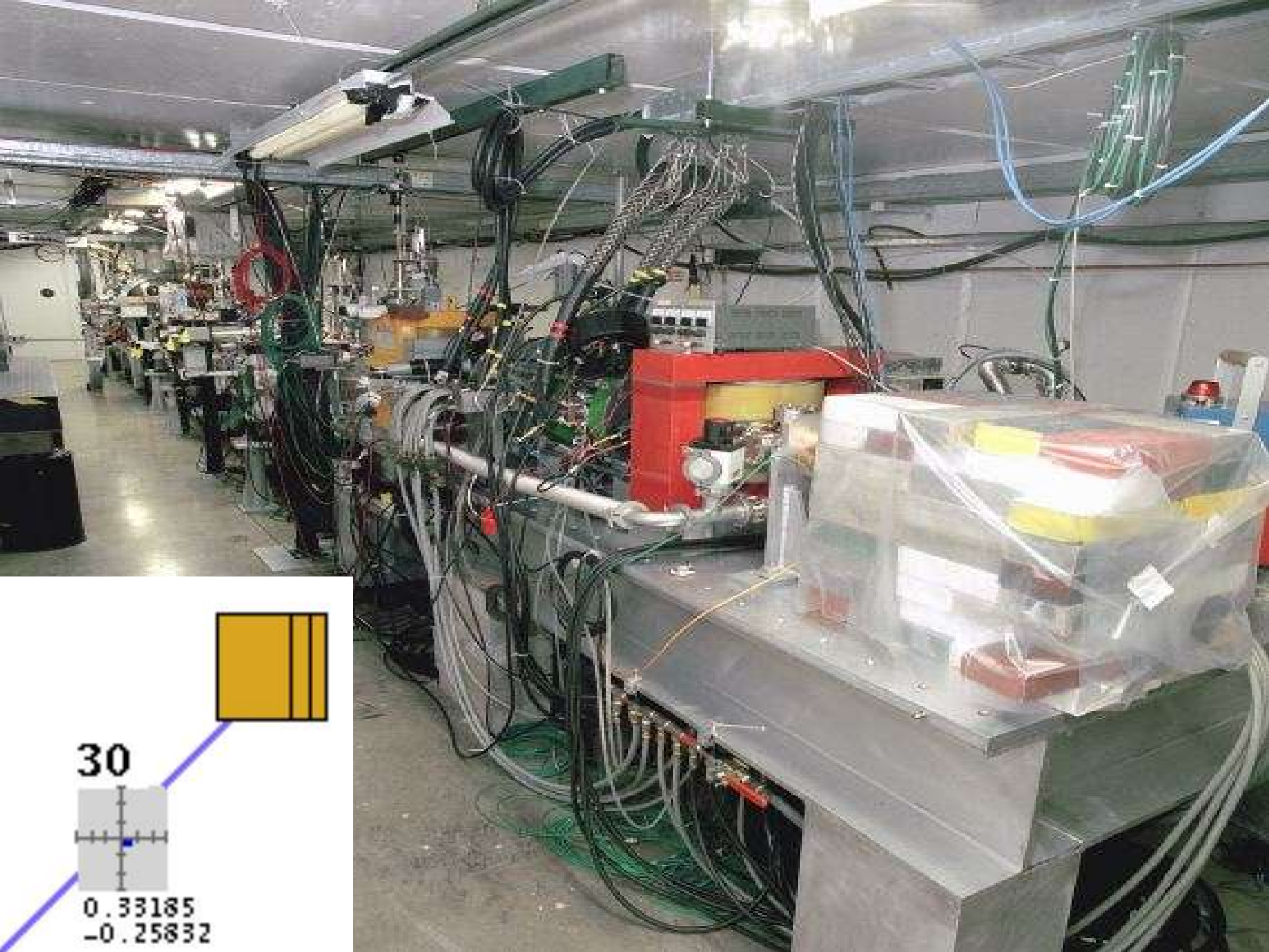
A0

- Goal: To study problems that high energy electron-positron linear colliders (TESLA) will have
- “It should be a well understood tool rather than a subject of experimentation”
- In August 2004: Next Linear Collider (NLC) + Global Linear Collider (GLC) + Teraelectronvolt Energy Superconducting Linear Accelerator (TESLA) = ILC


RF Gun
SOLBUCSOLMAN
1
0.388
2.350
MI

TDA 005-D
WT. 600 LBS


S


30
0.33185
-0.25832

Why JDOOCS?

- Java vs. C – More portability
  - More platforms
  - Web capabilities
- Extensibility
  - Standard Libraries
- New Components
  - Tabbed Pane, Triangle, Checkbox, Progress bar, Slider, Coloured Indicator, Case Statement

.CAF vs .XML

```
ED_COMPONENTS_ASCII_FILE_VERSION:
1.0
ED_COMPONENT_BASE:      "Solenoid_info"
{
  ED_FIGURE:
  {
    ED_SHAPE:  LEVEL: 0xffff , OUTLINE:
-1 -1 0 1 1 0 , F_COLOR: "Black" , END:
    MATRIX: 1 0 0 0 0 1 0 0 0 0 1 0
    USER_COORD: -1 -1 -1 1 1 1 B_COLOR:
"0"
    DEV_ADR: "///"
    UPDATE_RATE: 1
    FIXED_SIZE: 0
  }
  SIZE: 459 264
  MAX_SIZE: 1000 500
```

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<DOOCSLayeredPane name="steerer_win"
bounds="205,5,287,434">
    <borderType>No Border</borderType>
    <fillColor>255,255,255</fillColor>
    <transparent>false</transparent>
    <adr></adr>
    <grid>10,10</grid>
    <scale>true</scale>
    <DOOCSValue name="TitleVal"
bounds="8,8,272,81">
        <adr>///TITLE</adr>
```

Automatic Panel Generation

1. Select Doocs servers you want to talk to
2. Select components you want displayed
3. Generate Panel

- XmlGen.java
  - java XmlGen [serverList.txt] [mainPanelTemplate.xml] [repeatedPanelTemplate.xml] (ComponentTemplate.xml) ...

Bugs

- Values don't display strings FIXED
- Multiple Inheritance FIXED
- Graphs Sporadic
- 0 privileges errors/crashes
- Clean-up
  - hard coded paths

Things to be added

- Video/Streaming pictures
- Optionally:
  - Combo Boxes
  - Lists
  - Radio Buttons
  - ...

What next?

- Package a self contained demo for jdoocs
  - Shows off the features of jdoocs
  - Makes implementation go smoothly