



flair for FLUKA

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What's new in Version 0.7.1

- Version 0.7 or higher works **ONLY** with the new version of FLUKA
- Changed format of geometry **debugging and plotting to FREE**
- Modified Input class to keep the **floating point precision** to the maximum number of digits as it entered by the user.
- Multiple project support
- Full **Undo/redo** mechanism inside Input Editor and Plots
- Added **povray** exporting
- ROT-DEFI with names and new scoring particles
- New card filters (e.g. active cards from pre-processor)
- All auxiliary programs are configurable
- Automatic reporting of bugs
- Manual in good shape

Bodies Transformations & Lattice

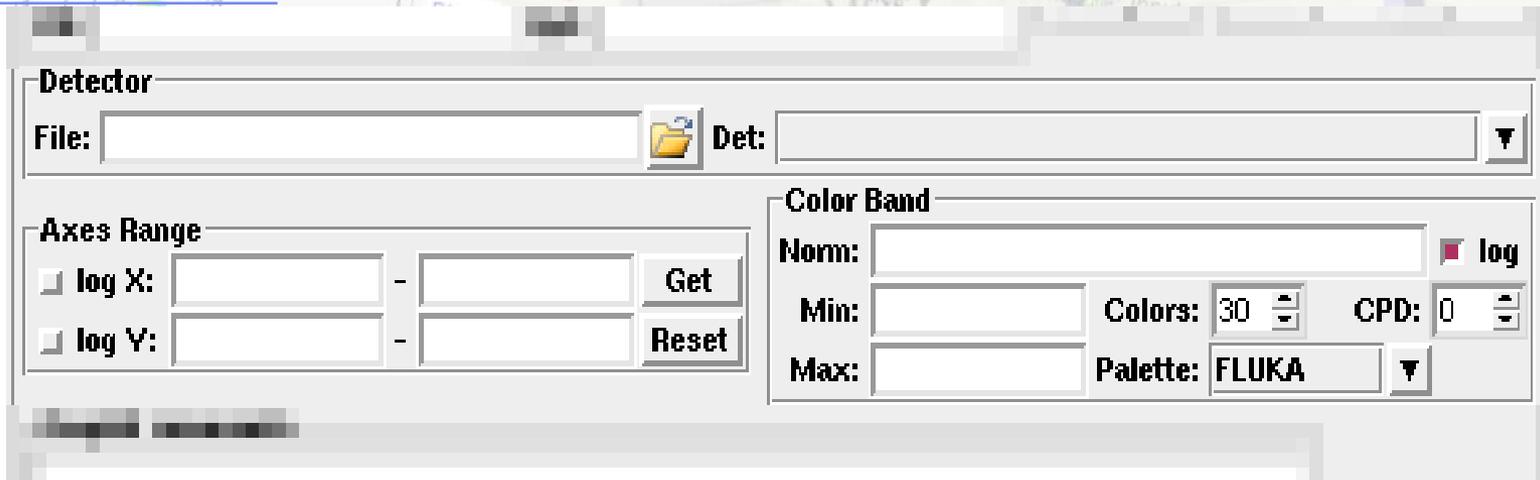
- Flair can perform geometrical transformation for bodies
- The **Geometry transformation editor in flair** can read and write **ROT-DEFI** cards with the transformation requested
- An easy way of creating a replica and the associated transformation is the following:
 - Selected the bodies defining the outer cell of the prototype
 - Clone them with (**Ctrl-D**) and change their names. Click on **"No"** when you are prompted to change all references to this name.
 - Open the Geometry transformation dialog (**Ctrl-T**)
 - Enter the transformation of the object in the listbox
 - Click on **"Transform"** to perform the transformation on the bodies
 - Click on **"Invert"** button to invert the order of the transformation
 - Enter a name on the **"ROT-DEFini"** field and click **"Add to Input"** to create the **ROT-DEFI** cards
 - Now you have to create manually the correct **region** and the **LATTICE** card

Automatic plot generation

Plot List		
File	Title	Type
geometry	nTOF Target Geometry	Geometry
enedep	Deposited Energy	USRBIN
fluence	Particle Fluence	USR-1D
resnuc	Residual Nuclei	RESNUCLE

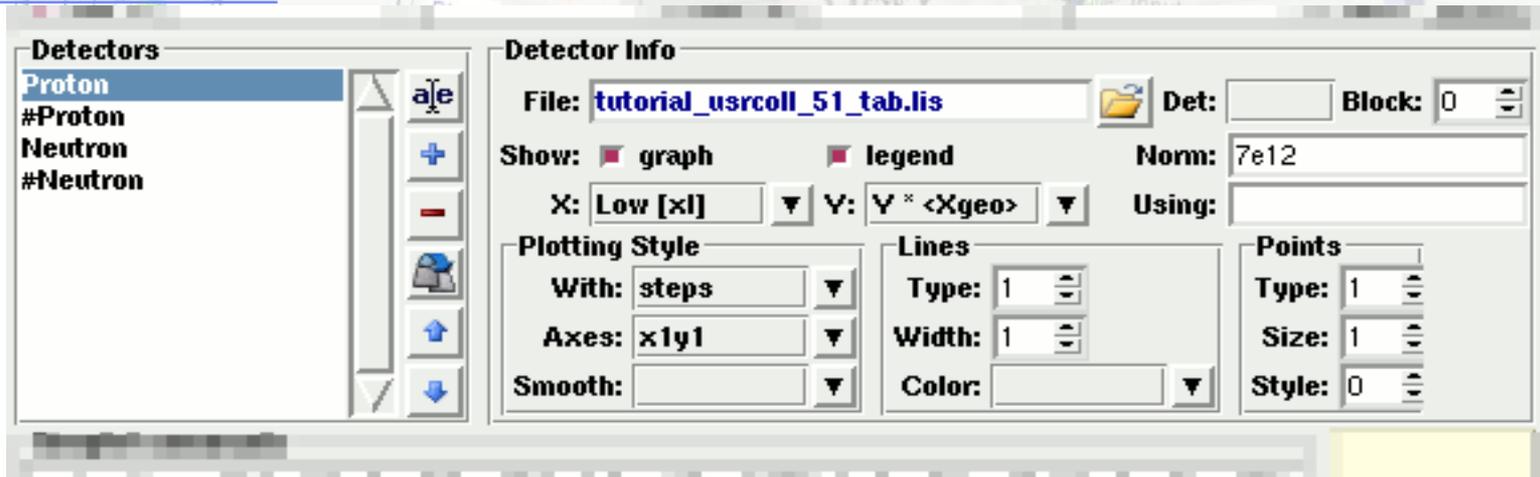


USR-2D Double Differential Plot



- New plotting dialog for displaying the 2D histogram from USRBDX

USR-1D Single Differential Plots



- Added possibility to plot slices (**Block**) from 2D distributions
- Check boxes for enabling or disabling graph and label
- Manually select the plotting style (**Using**) in case the user wants to overlap experimental data
- With gnuplot V4.2 or higher there is the possibility to select the **Color** of the line by name

USRBIN Plot



- The errors can be plotted in the USRBIN by selecting the checkbutton errors.
- WARNING: The information of the bins is treated as being uncorrelated therefore the errors could be underestimated. Use as indication only
- New feature: 1D projection

