

# **JCNS School on Data Analysis for Quasielastic Neutron Scattering and First International SLAW and FRIDA User Meeting**

**zeroth circular (call for comments)**

***audience: users and instrument responsables of  
neutron time-of-flight and backscattering spectrometers***

***topics: routine and non-routine steps of raw data processing,  
interactive visualisation and conditioning of pluridimensional data,  
curve fitting, typical problems in analysing quasielastic neutron data,  
discussion of future software development***

**date (to be decided after initial feedback):  
25-26 february or 25-26 march or 15-16 or 22-23 or 29-30 april 2010  
(all Thu/Fri, but other days of the week are by no means excluded)**

**location: JCNS at FRM II, Garching bei München, Germany**

**advisory committee (to be confirmed):**

***Florian Kargl (DLR Köln)  
Marek Koza (ILL Grenoble)  
Luis Carlos Pardo (UPC Barcelona)  
Tobias Unruh (FRM II Garching)  
Reiner Zorn (FZ Jülich)***

**organising committee:**

***NN (logistics)  
Andreas Erven (computing environment)  
Joachim Wuttke (chair)***

**contact: [j.wuttke@fz-juelich.de](mailto:j.wuttke@fz-juelich.de)**

## programme (first draft)

### *first day*

introduction: thematic overview; workshop organisation	Wuttke	30'
computing environment during the school; access to sample raw data; installation of Frida under Linux and Windows	Erven	20'
structure of raw data on TOF and BS spectrometers; elementary raw data processing	Unruh/Wuttke	20'
batch raw data processing with SLAW	Wuttke	20'
non-trivial steps of raw-data processing: detector efficiency, self absorption. Normalisation to vanadium or to low-T scan? Subtraction of empty cell or/and of flat background?	Wuttke/Unruh/discussion	1h30'
data visualisation and fitting with LAMP	Pardo	40'
interactive, iterative, command-line driven data processing and visualisation: basic concepts of FRIDA, elementary fitting	a user (S.Busch?)	40'
practical exercises		open end

### *second day*

convolution with resolution; special problems when convoluting with sharply peaked theory	Wuttke	30'
Fourier deconvolution	?	30'
phonons: density of vibrational states	Zorn?	
Publication-grade graphics by editing FRIDA's PostScript output	Wuttke	30'
practical exercises		1h30'
multiple scattering: qualitative effects; approaches to simulation	?	
Why isn't every physicist a Bayesian? On the theoretical foundations of data processing and fitting and of error bars	Pardo	
Building a community: mailing list, bug tracker, GIT repository	Erven/Wuttke	15'
Directions for future development	discussion	open end