



# McStas Example Instruments



MDANSE 2018

Simulation of Inelastic  
Neutron Scattering  
using McStas and  
material dynamics models

Sept. 24<sup>th</sup> – 28<sup>th</sup> 2018

Puerto de la Cruz – Tenerife

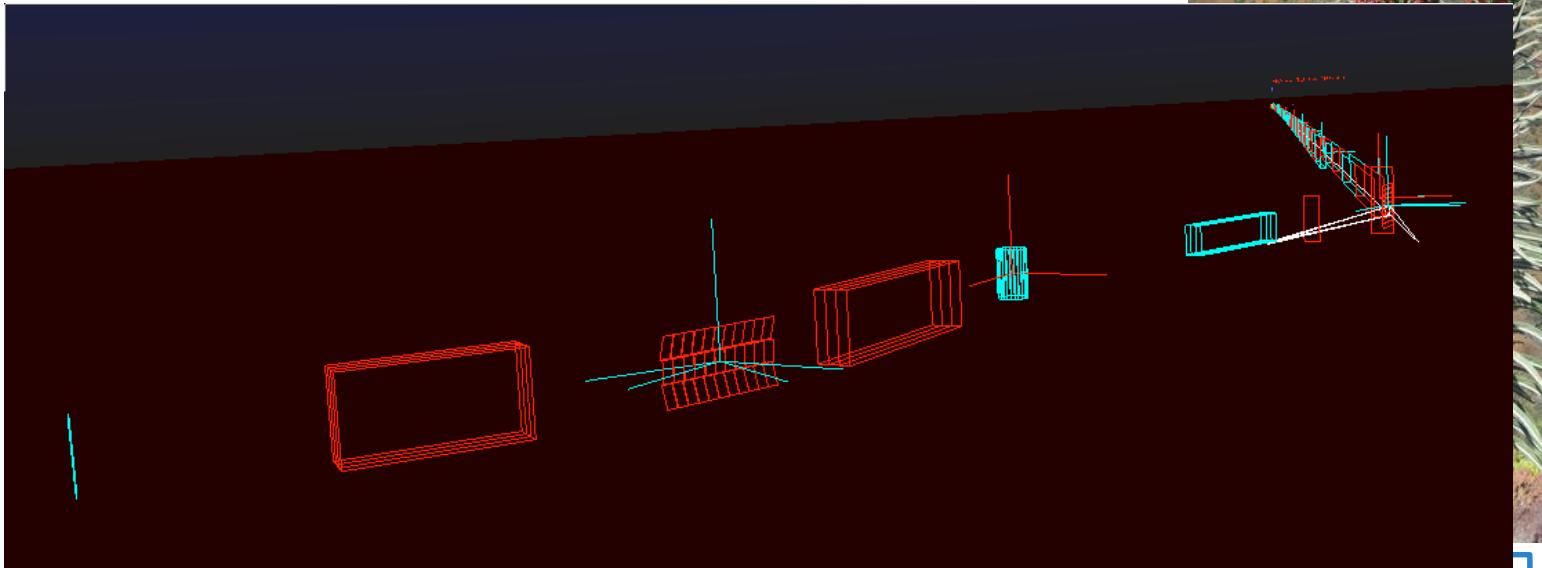
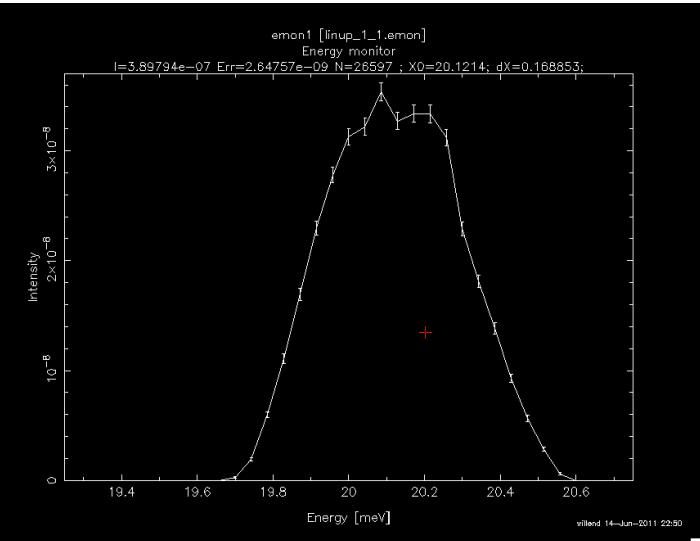
(c) A. Mart (2012)





# 5 TAS (linup-? are all Risø TAS 1):

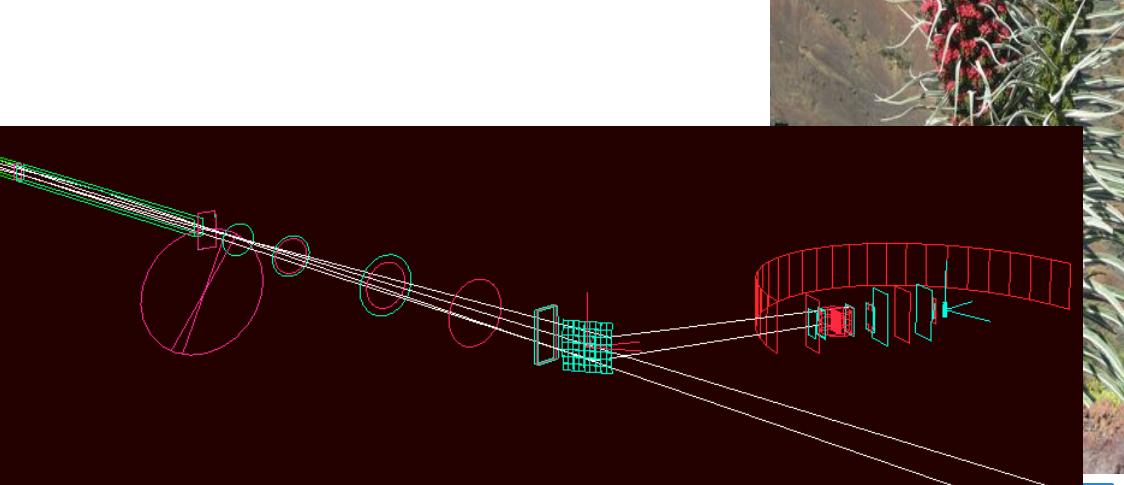
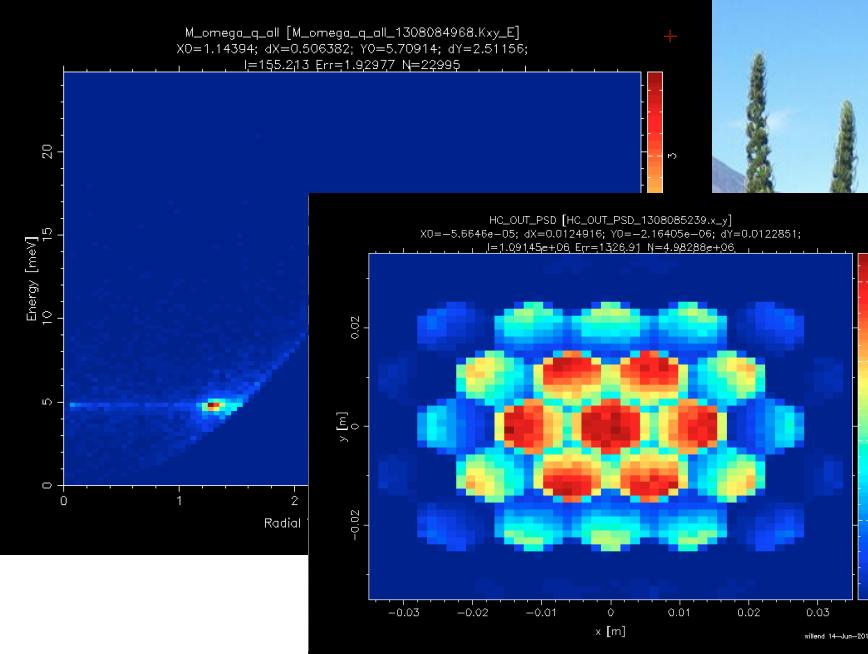
- | ILL\_H142\_IN12.instr
- | ILL\_H25\_IN22.instr
- | h8\_test.instr
- | templateTAS.instr
- | linup-1.instr
- | linup-2.instr
- | linup-3.instr
- | linup-4.instr
- | linup-5.instr
- | linup-6.instr
- | linup-7.instr





# 7 TOF spectrometers:

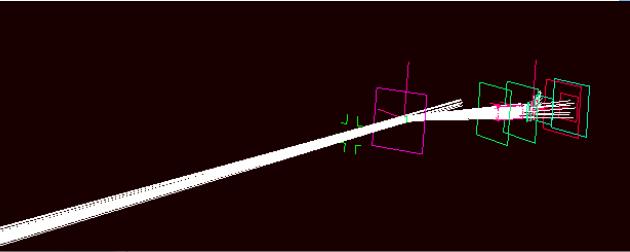
- | ESS\_IN5\_reprate.instr
- | ILL\_BRISP.instr (Small-angle)
- | ILL\_H15\_IN6.instr
- | ILL\_H16\_IN5.instr
- | ISIS\_HET.instr
- | PSI\_Focus.instr
- | templateTOF.instr



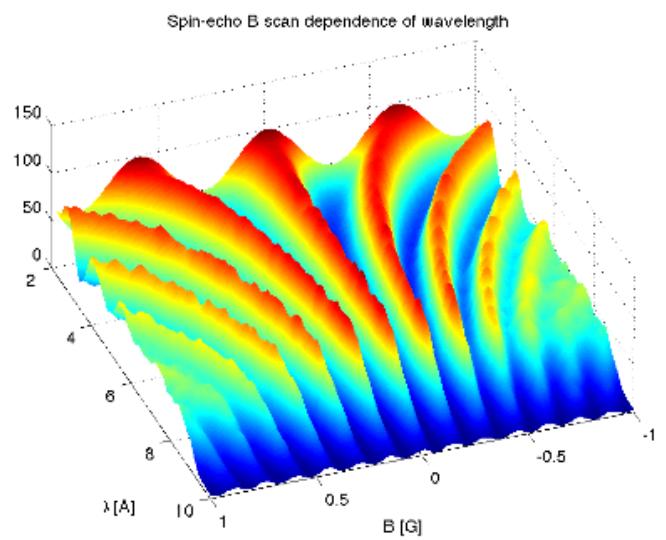
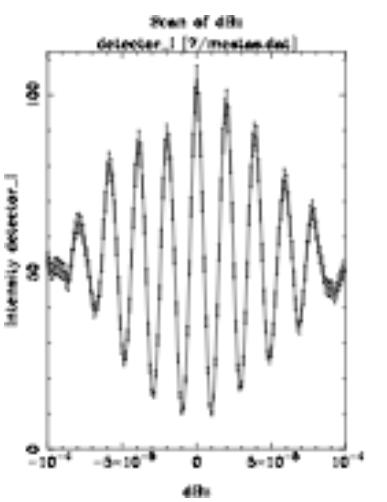


# 1 Hybrid spectrometer + 1 Spin-echo

- 1 Hybrid spectrometer:  
prisma2.instr



- 1 Spin-echo (two different implementations, same instr):  
SE\_example.instr
- SE\_example2.instr

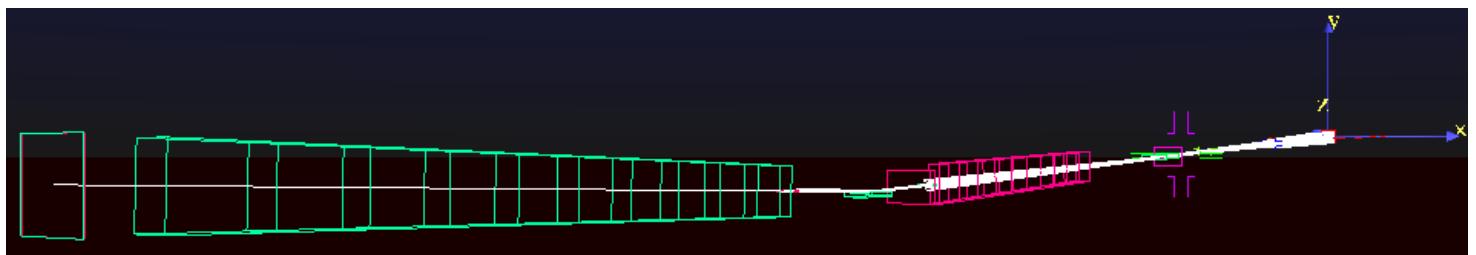
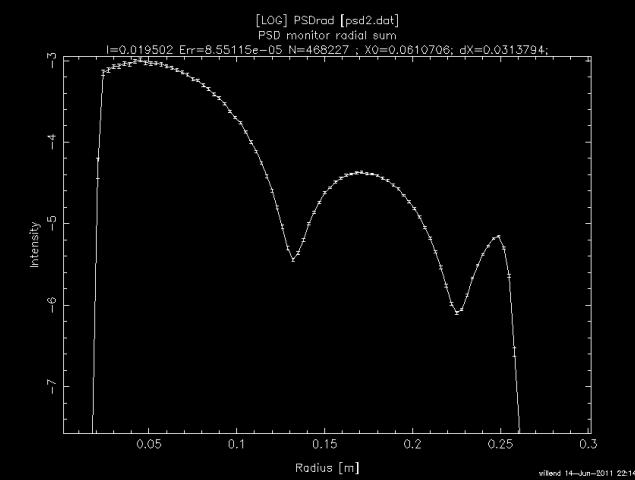
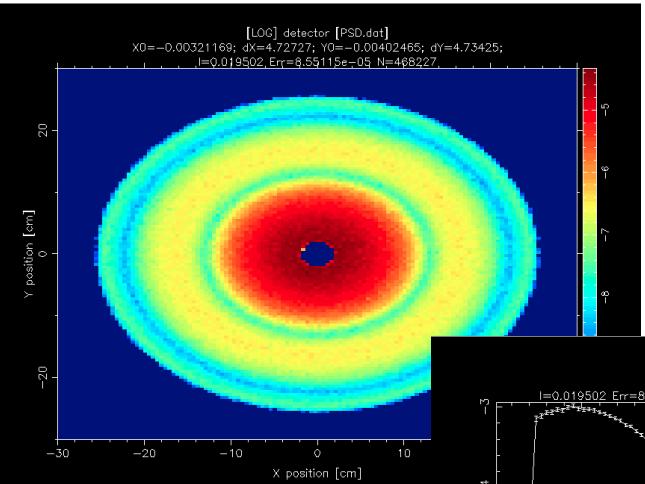




# Large scale structures

2 SANS:

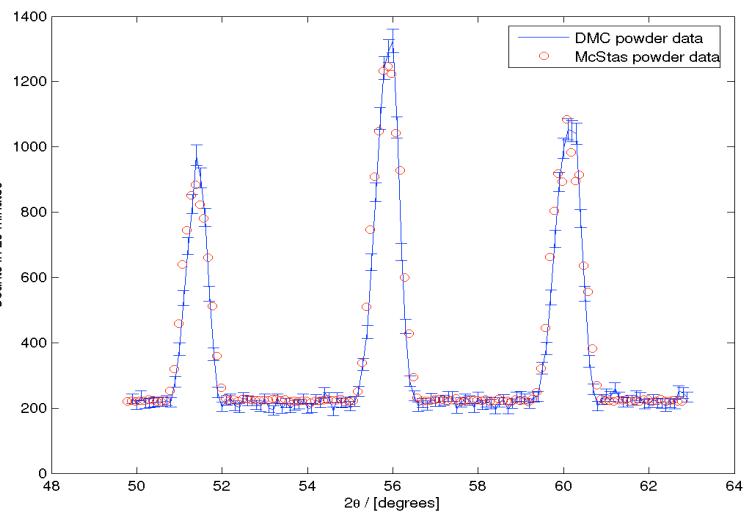
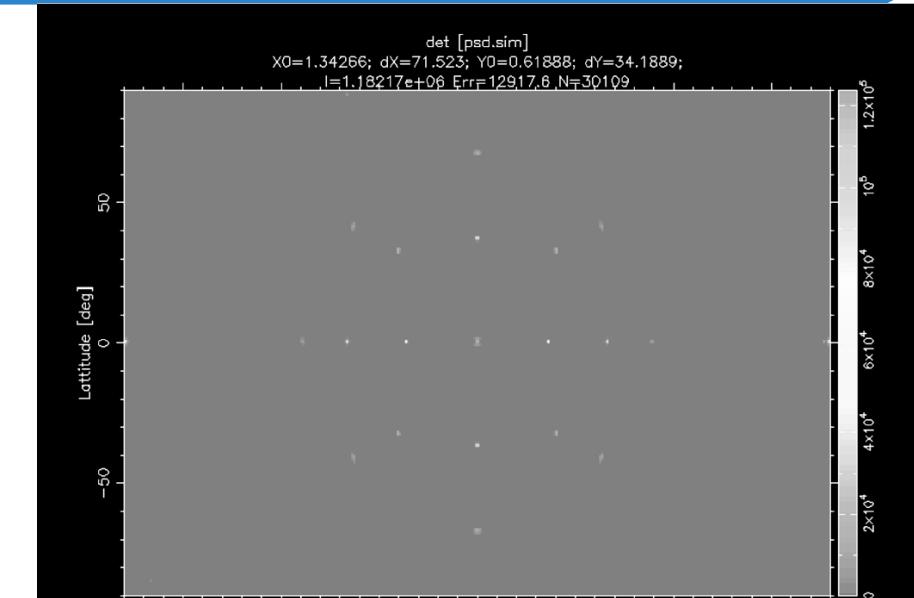
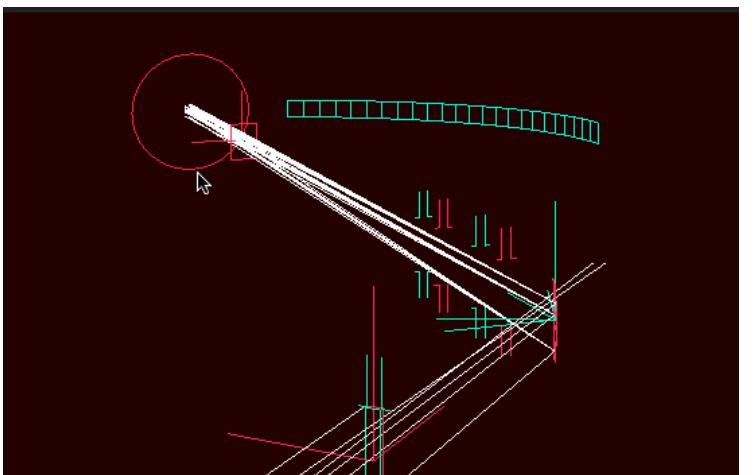
- | FZJ\_KWS2\_Lens.instr
- | FZJ\_SANS\_KWS2\_AnySample.instr
- | FZJ\_SANS\_KWS2\_DebyeS.instr
- | FZJ\_SANS\_KWS2\_Guinier.instr
- | FZJ\_SANS\_KWS2\_NoSample.instr
- | SANS.instr
- | 1 Reflectometer:
- | ISIS\_CRISP.instr (Not an accurate model)





# Diffractometers

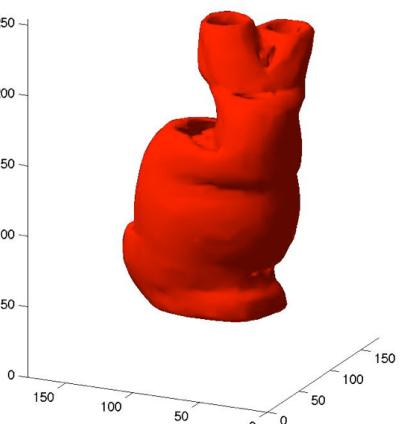
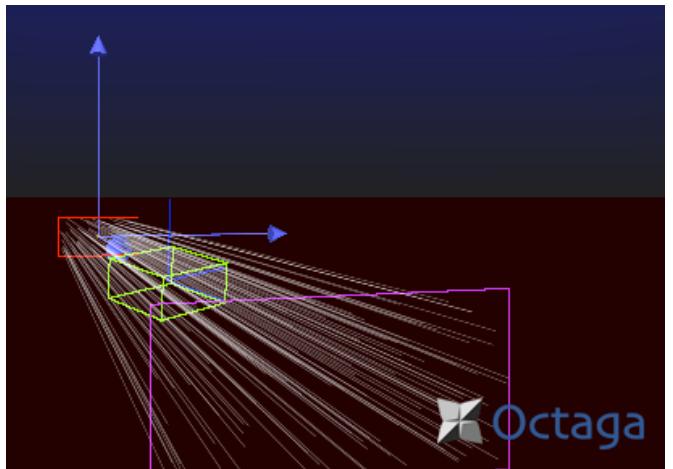
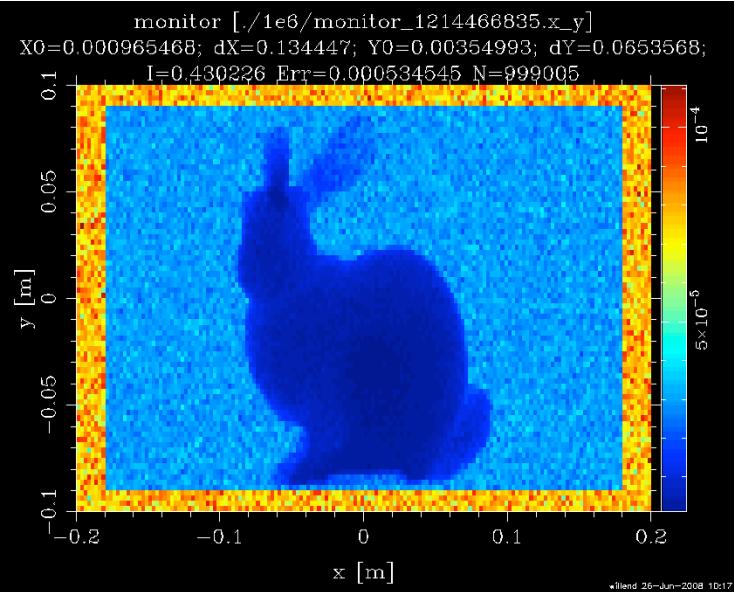
- | ILL\_D1A.instr
- | PSI\_DMC.instr
- | templateDIFF.instr
- | templateLaue.instr





# Imaging

- Tomography.instr
- comes with simple
- filtered backprojection
- reconstruction (Matlab)





# Histogrammer.instr

- | Histogrammer.instr
- | - takes any kind of supported ‘event input file’,  
e.g. from Vitess. String parameter used as  
`Monitor_nD` options, can make all types of  
histograms from the event file.
- | (I.e. conversion tool for plotting of data)

