

# Technical

- ❑ Implement Qt's **Model/View** pattern: one backend model, many front view widgets.
  - View 1: model component functions, as a tree
  - View 2: model fit parameters, as a list
  - View 3: evaluation of the model in a 1D plot
  
- ❑ Install/deploy and run as a stand-alone application.

# Functionality

❑ Backend model accessible both through an *ipython* interpreter console and the View widgets.

❑ Simultaneous fit of multiple runs

Example: sample with relaxation times  $t_1 < t_2 < t_3$

– instrument *A* can detect  $t_1$  and  $t_2$  processes.

$$M_A = R_A \otimes [L(t_1) + L(t_2)] \text{ to fit against } data_A$$

– instrument *B* can detect  $t_2$  and  $t_3$  processes.

$$M_B = R_B \otimes [L(t_2) + L(t_3)] \text{ to fit against } data_B$$

Simultaneous fit of  $(M_A, data_A)$  and  $(M_B, data_B)$  with constrain  $L(t_2)$  being the same.

# Functionality

- ❑ Fit in the time-domain as well as in the energy-domain.
- ❑ Domain as a set of points, allows for a discontinuous domain



- ❑ Simultaneous fit of runs in the time-domain along with runs in the energy-domain (mixing spin-echo with QENS)
- ❑ Plot the resolution-broadened model components
- ❑ Plot the Q-dependence of fit parameters