[for versions from **1.8.0.25**]

Imagine you have maesured set of spectra manually that differs e.g. in polar angle. You can import spectra to KolXPD and convert them into one angle-resolved PRE item.

Spectra in PRE items can be processed and displayed together quickly and easily. All spectra can be fitted with same fit function and fit results can be displayed in graphs. 2D angle-resolved experiments can be displayed as image maps of intensity in polar coordinates, e.g. XPD diffraction patterns. Band-mapping experiments can be displayed as image of intensity in binding energy versus angle/primary energy coordinates. 2D angle band-mapping can be displyed also in ***k***-space coordinates.

How to make conversion:

1. Import spectra and prepare them in dedicated folder and in appropriate order.
2. Select the folder (or select desired spectra at once) and than right-click to invoke context-menu. Click on *Convert to prm-resolved experiment ...* item.
3. Conversion window will be opened. Fill in all fields according your experiment. Informations and erros are displayed at the bottom.
4. X axis range: All spectra should have similar X axis (E_{kin} or E_{bin}) range. Conversion window will automatically determine common interval and finest step. Values can be altered in fields *Start*, *Step*, *End* at the right-top in *Axes/Units in item data* panel. X axes of input spectra must *not* be exactly same - Y data will be interpolated into specified range during conversion.

5. Select type of a parameter that varies in your sequence. Then you can change title of the parameter. You should check length of the sequence and specify starting value of the parameter and it's step.
6. You can convert data where 2 parameters are changing through the sequence. You must specify values for inner and outer loop separately. Inner loop is that parameter which changes between 1st and 2nd spectrum and then after length of inner loop starts from starting value again. Outer loop is parameter that is same for each run of inner loop and goes from starting value to the ending one only once. Check loop lengths, their multiple must correspond with input data count.
7. Click OK, PRE item will be created and selected.

Download a tutorial to try conversion to PRE items: http://www.kolibrik.net/science/kolxpd/tutorials/