



Contribution ID: 159

Type: **Poster**

PS3-25 The Development of Angular Measurement System for Crystal Collimation and Channelling Experiments

Thursday, 9 October 2014 17:00 (1h 30m)

Crystal channelling and collimation experiments are based on precise angular orientation of crystals provided by linear and rotational stages. Autocollimation principle is one of the most optimal, direct and contactless method widely used for precise angular measurements.

In the frame of UA9 crystal collimation experiment at CERN different type of commercial and custom made autocollimators have been used for crystal orientation alignment, measurement as well as for goniometer characterization. The developing of radiation hard laser autocollimator will allow to get on-line and direct control of crystal orientation with possible close-loop operation. One of the important application is characterization of bending crystal parameters based on high-resolution optical scanning deflectometry which could be performed by the similar type of measurement system.

The status, working principle, characteristics of laser autocollimation measurement system for different area of crystal applications are described in the presentation.

Primary author: Mr GAVRIKOV, Yury (PNPI)

Presenter: Mr GAVRIKOV, Yury (PNPI)

Session Classification: Poster Session