Contribution ID: **19**   Type: **oral**

Diffraction Image of a narrow X-rays beam in Crystals with Weak Deformation

Thursday, 8 June 2023 16:30 (20 minutes)

The problem of dynamic diffraction of X-rays from a point source on the spatial lattice of a crystal with a weak deformation field is considered. Theoretical study is based on the asymptotic representation of the Green-Riemann function for a pair of Takagi-Taupin equations of the hyperbolic type. Experimental studies were carried out on quartz crystals in the presence of a temperature gradient perpendicular to the reflecting planes. The conditions and characteristics of focusing depending on the distances source-crystal-detector and parameter of the deformation field are considered.

Primary authors: Mrs SHAHVERDYAN, Arus; Mr BAGDASARYAN, David; Prof. TROUNI, Karapet; Dr NOREYAN, Serob; KOCHARYAN, Vahan

Presenter: KOCHARYAN, Vahan

Session Classification: S5: Applications & X-Rays