



Contribution ID: 51

Type: **not specified**

## X-Ray Spectroscopy of Fluorescence Radiation Channeling in $\mu$ -Capillary Holed Glass Plates

*Wednesday, 26 September 2012 09:50 (15 minutes)*

In this work soft X-ray synchrotron radiation transmitted through microchannel plates was investigated. Primary monochromatic beam penetrates into microchannels of a hexagonally regular polycapillary structure  $\sim 0.4$  mm thick, with channels of  $10\text{ }\mu\text{m}$  hole diameter and  $12\text{ }\mu\text{m}$  pitch. Fine structure of reflection and XANES spectra at the Si L-edge at the exit of  $\text{SiO}_2$  MCP has been analysed. The characterization of the X-ray fluorescence exiting by micro-channels and the transmission by hollow silicon-glass microcapillary structures is the objective of this research. The anomalous dispersion region (Si L-edge) channeling of X-rays in MCPs as well as the interaction of standing waves in a media with unoccupied electronic states has been studied.

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**Session Classification:** S4.3 X-ray Channeling & X-ray Optics

**Track Classification:** X-ray Channeling & X-ray Optics