



Contribution ID: 105

Type: Poster (Session A)

Radiation damage studies of multipixel Geiger-mode avalanche photodiodes

Results on the radiation hardness of multipixel Geiger-mode avalanche photodiodes (G-APDs) are presented. Recently-developed G-APDs from three manufacturers (Hamamatsu (Japan), CPTA(Russia) and Mikron/Dubna(Russia)) were exposed to 28 MeV positrons with fluences up to $8 \cdot 10^{10}$ positrons/cm² at the Paul Scherrer Institute. The effects of this radiation on many G-APD parameters such as gain, photon detection efficiency, dark current, noise and dark count rate are shown and discussed.

Primary author: MUSIENKO, Iouri (Northeastern University)

Presenter: MUSIENKO, Iouri (Northeastern University)