

## **HYBRID MICROPIXEL DETECTOR AT THE FOCAL PLANE OF THE MASS-SPECTROMETER**

**M. Campbell, L. Tlustos, D. Maneuski, Val O Shea,  
V. Storizhko, V. Eremenko, S. Homenko, A. Shelekhov,  
V. Pugatch, O. Kovalchuk, A. Chaus, O. Okhrimenko, D. Storozhik**

Results on testing TimePix micropixel chip as a detector of low energy ions in a focal plane of the laser mass-spectrometer are presented. Two options were tested: hybrid micro-pixel detector as well as metal micro-pixel detector (naked read-out chip with a metal mesh to improve a charge collection). For both cases a response uniformity of pixels over ion mass, energy and detection position has been thoroughly studied. The results obtained illustrate capability of both detector modes to be used for creating “electronic focal plane” of a mass-spectrometer with obvious advantages of real time devices.

*Keywords:* TimePix micropixel chip, hybrid micro-pixel detector, metal micro-pixel detector, mass-spectrometer, secondary electron emission.