

## Results of X-ray and Neutron Micro-Radiography and Micro-Tomography with Pixel Detectors of Medipix2 Type

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Pixel detectors of Medipix2 type were designed as single photon counting detectors but can also be adapted for position-sensitive single neutron detection. These devices have several advantages making them fit for high spatial resolution radiography and tomography. Examples of transmission images and tomographic reconstructions using X-rays and slow neutrons will be shown demonstrating effects that can affect the image quality. The potential of Medipix2 device as high-resolution sensor for X-ray imaging (about 3 micrometers) and neutron imaging (about 50 micrometers) will be exhibited on 2D and 3D images of biological objects, archeological samples and on observation of defects in metallic and composite materials. A brief description of proposed development of such pixel detectors and their perspective applications will be also given.

Lundi,  
6 novembre 2006  
10h00

Université de Montréal  
Pavillon André-Aisenstadt  
Salle 1360

