

IMSS Instrument R&D team

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IMSS Instrument R&D team has started from May 2010. Our team is trying to develop new detector system for material physics and biology. First, there was a great progress of Data Acquisition System for some large-scale detectors installed in J-PARC MLF, by co-operation with IPNS Electronics System (E-sys) group. Photon Factory also started some detector developments using fast signal processing with the E-sys group of IPNS from FY2009. We now intend to continue and encourage the projects with advanced electronic technique in IMSS.

Our poster will present some leading R&D projects at the initial stage:
in Photon Factory:

- # Ultra-fast signal processing system for Si-APD array X-ray detectors.
- # Auger-electron detector system for the depth-resolved X-ray magnetic circular dichroism (XMCD).

in J-PARC MLF (Neutron and Muon):

- # The NEXT Position-Sensitive Detector project (replace of He-3 PSD)
 - # MPPC (Multi-Pixel Photon Counter) array detector for μ -Spin Relaxation.
- and so on.