Study of Scintillating plastic fiber tracking detector for Neutron

Our group have observed solar neutron to elucidate the ion acceleration mechanism at the solar surface. However solar neutrons are absorbed into atmosphere by means of ground observation. So we can observe only high energy solar neutrons (>100MeV). To elucidate the ion acceleration mechanism in association with solar flares we wish to observe solar neutron over the broad energy range. So observation in space is necessary to obtain the energy spectrum in the energy range from 10-100MeV.

Satellite(JEM)-borne solar neutron detector is made by using scintillation fiber and multi-anode photomultipliers. We will report character of this detector.