

Figure 1: dE/dX spectra measured with a 500 μm thick silicon sensor attached to Timepix3 in an ion fragment beam created by 385 GeV/c primary lead hitting a beryllium target at the SPS at CERN. A superposition of Landau curves was used to model the the observed peaks due to ion framgments of different nuclear charge Z . The detector was irradiated at different angles.

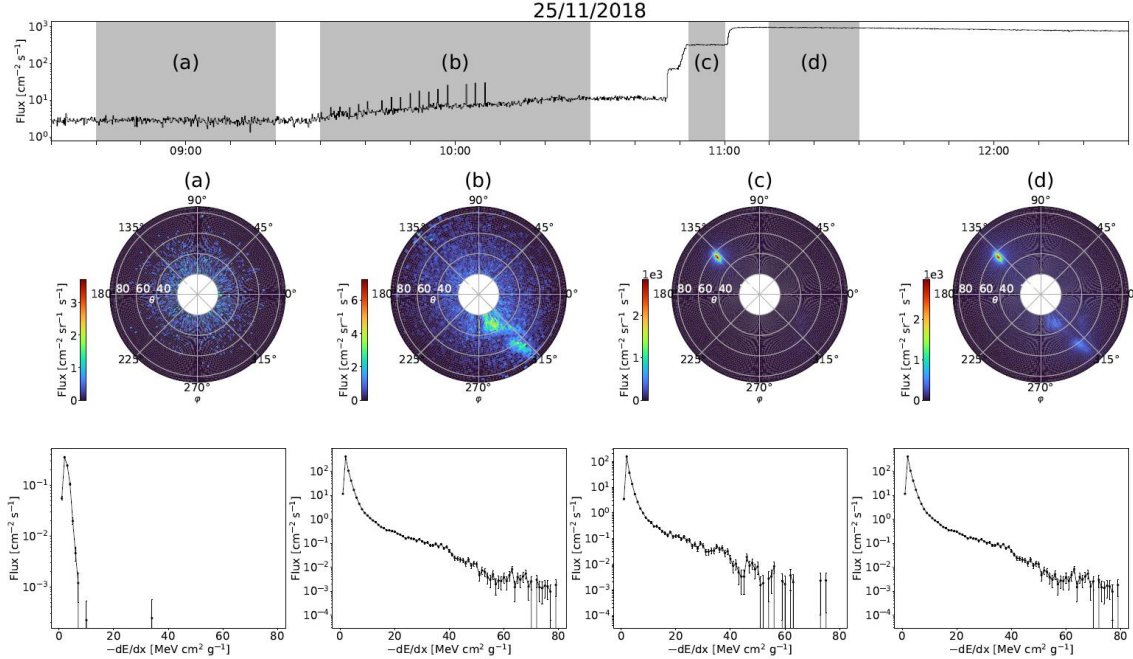


Figure 2: Time-resolved measurement of the radiation field characteristics measured within MoEDAL at IP8: the total particle flux (top), particle directionalities of straight particles of length above 5 pixels illustrated in a polar vs azimuthal angle map and the particle dE/dX (bottom) for background radiation (a), during beam injection (b) during beam tuning (c) and in stable physics beam (centre).