

Workshop on Advanced Radiation Detector and Instrumentation in Nuclear and Particle Physics (Online)



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Type: Talk

Application of MPGD detector in Medical Imaging and Treatment

Friday 29 October 2021 12:20 (20 minutes)

We will discuss the Micro-Pattern Gas Detector (MPGD) which is a recently developed gas-filled detector in the series of Multi-Wire Proportional Chamber (MWPC) and Resistive Plate Chamber (RPC). MPGD have some characteristics which make it suitable to use in medical diagnosis & prevention techniques. MPGD uses a fine readout electrode structure, so it can obtain much higher spatial resolution compared to that of the conventional gas detector based on the multi-wire proportional chamber. Although MPGD detectors are being used in particle and nuclear physics experiments, the excellent spatial and time resolution make them an invaluable tool for other applications too i.e., radiography and low energy gamma imaging, dosimetry and hadron therapy, X-ray fluorescence.

What is your experiment?

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