

Trainee's Project Report

Job Code	PH104
Department	PH
Discipline	Experimental Applied Physics
Supervisor	ROPELEWSKI Leszek

Description

Development of advanced gas micro-pattern particle detectors
The trainee will work in a multidisciplinary team of physicists, engineers and technicians to gain experience in the field of radiation detectors using gas as a detecting medium. One of the activities of the PH/DT2-ST Special Technologies section is development and applications of the new Gas Electron Multiplier (GEM) technology detection technique invented at CERN and gaining growing interest in the detector community. This comprises study of basic physical properties, detector design, optimization and prototype construction, participation in production of large detector systems for the experiments for tracking and triggering. In addition we are working on the application of this technology in other fields as X-ray imaging, UV light detection etc.

As a team member the trainee would participate in the current activities of the group. This would include testing of the final detector developed for the TOTEM experiment including electronics, trigger and system aspects.

For more information please consult web page:

<http://gdd.web.cern.ch/GDD/>

Special Requirements

University degree in physics.

Basic knowledge of electronics and programming. Open attitude to team work .

Training Value

The trainee will gain experience in all aspects of gas detector operation and development.

