

## **Tracking upgrade for FOPI and Prototype studies for PANDA**

**Rahul Arora**

**ESR**

**GSI Darmstadt**

**MC-PAD supervisor : Dr. Christian J Schmidt**

**PhD Supervisor : Prof. Klaus Peters, Dr. Bernd Voss**

My Presentaion will deal with the Fabrication and testing of various components of the tracking detector. I will start with the most important component of my detector i.e GEMs (Gas Electron Multipliers) foils. I will explain the handling,testing and gluing of GEMs on the frames going to fit in the detector. Then I will explain about the field cage fabrication and testing. Then I will talk about the fabrication and testing of media flange and all the components mounted on it. Also some tests on the way to fabrication. I will also discuss about the whole assembly of the GEM detector without the field cage and testing at TUM. There will be few slides HV stability tests on each component and the tsetup involved in testing. Most of my talk will be in the form of pictures explaining different steps of detector fabrication and testing.