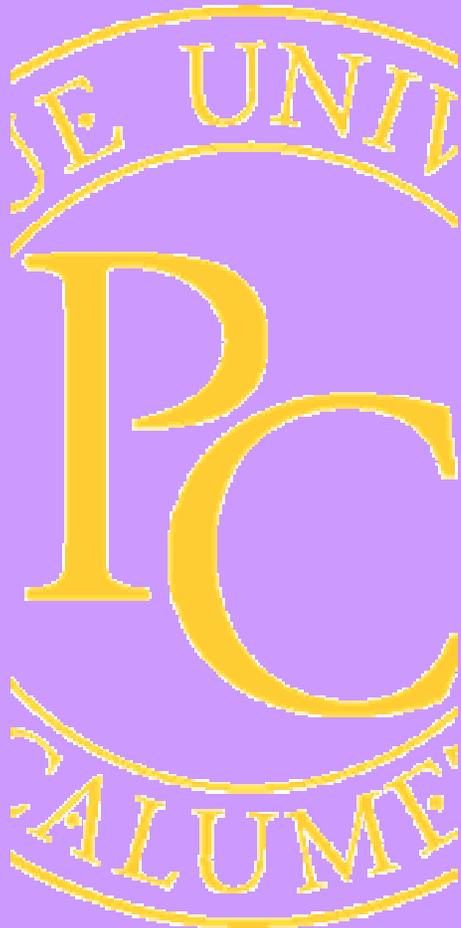


# Purdue University (Calumet) Application



**Neeti Parashar**

**CMS WEEK @ CERN**  
**19-23 September, 2005**





# Highlights

- I am already a member of CMS Collaboration since one year
- The current request is to **change the institution**
- Working on the Forward Pixel Detector
  - Simulation of Geometry
  - Capacitance measurements on the Readout chips
  - Assembly and testing of the detector

# Indiana – The Hoosier State

Hammond



Indianapolis

- 38<sup>th</sup> biggest state in USA
- 14<sup>th</sup> most populous state
- Named after local Indians
- Indianapolis is the largest city
- Known for its excellent education institutions
- 20 miles southeast of Chicago

# My current involvement

- **Member of Tevatron Collider at Fermilab since 1995, with CDF as the startup experiment**
- **Member of the DZERO (DØ) Collaboration since 1997**
- **Leader of the High Energy Physics Program at Purdue University Calumet (PUC)**
- **Group expected to expand by two more faculties next year**
- **CMS Activities pursued through USCMS-LPC (LHC Physics Center) at Fermilab**

# Positions held at DØ

- **Coordinator of Level 3 Jets**
- **Convener of the Higgs Associated Production mode**
- **Member of the Tevatron Electroweak Group**
- **Leader of the Run II Muon Data Acquisition system**
- **Designed the buffering scheme for the entire Run II Muon Detector**
- **Developed the first analysis technique at DØ to measure the direct  $W$  boson width**

# Plans for CMS

- **Main Task on the Forward Pixel Detectors**
  - **CMS Tracking with Pixel Detector**
    - **Geometry – First version nearly ready**
    - **Alignment**
- **A student worked on the testing of Pixel detectors with Bruno Gobbi and Muzaffar Atac at SiDet (Silicon Detector Facility) Fermilab**
- **Physics Interests**
  - **Electroweak physics**
  - **Higgs boson**

# Official Proposal

- **Personnel**
  - **Neeti Parashar: 50% FTE**
  - **Post-doc: 50% FTE**
- **National Science Foundation (NSF) has funded this effort**
- **Startup funds provided by the University**



# Future

- **Looking forward to continued participation in CMS**
- **Do interesting Physics**

**“THANK YOU”**