

# Fermilab Internship in Physics of Accelerators and Related Technology for International students (PART I)



# About Fermilab

- Major High Energy Physics laboratory in the US and one of the largest in the world. About 2000 employees.
- Fermilab's Tevatron collider complex is a unique instrument, currently highest energy in the world
- Organization
  - Accelerator Division
  - Accelerator Physics Center
  - Center for Particle Astrophysics
  - Computing Division
  - Particle Physics Division
  - Technical Division





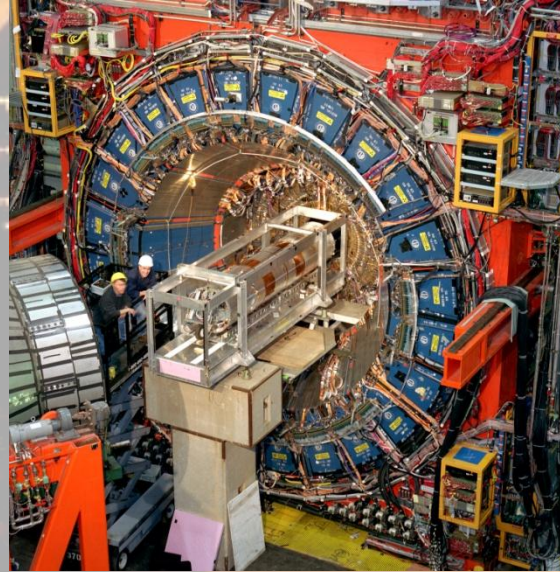
# Fields of study and projects

## Fields of study

- Collider Physics
- Neutrino Physics
- Dark Energy

## Projects:

- Long Baseline Neutrino Experiment
- Mu2e
- Project X
- JDEM



# PARTI

*The main goal of the PARTI is to introduce the students from universities of the former Soviet Union to the accelerators physics, Fermilab, and the life in the USA*

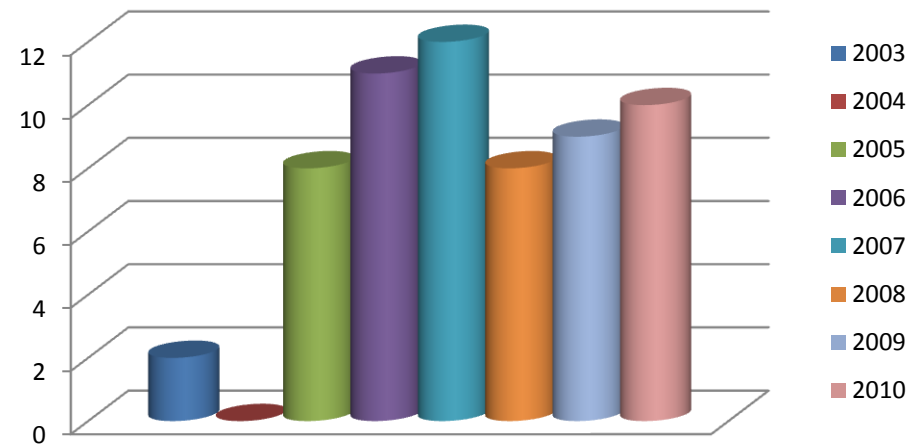
- The program started in 2003, 2 students from NSU.
- Reorganized in 2007, since then ~10 students each year
- Attract bright students to the field of accelerator physics and technology
- Provide the students with an opportunity to experience work and life in the USA

# Program statistics

- Universities representation (2003 – 2010)
  - NSU- 30, MIPT – 21
  - MSU, NSTU, MEPhI – 2
  - AmurSU, SaratovSU, BelarusSU – 1

*Average GPA in 2010 is 4.8*

Number of students per year



# PARTI program

- Assignment – you will be working on a research project under supervision of a lab expert.
- Academic lecture series
  - Accelerator physics course
  - Summer lecture series
  - Fermilab seminars
- Tours
  - Fermilab tours
  - University visits
  - Recreational program
- Weekly meetings
  - First report / final report
  - Invited speakers





# Criteria for PARTicipation

- Student of a university in a country of the former Soviet Union, majoring in Physics or Engineering.
- At least one full year at the university at the moment of applying.
- At least 4.0 Grade Point Average.
- Fluent in English.

# What to do?

- Application Form
- University Course List With Grades.
- Letters of Recommendation.
- Your Essay.

## Deadlines:

- Deadline for submitting **all** required documents is **January, 6 2011**
- They will inform you of the application status by **February, 3 2011**



# Our experience

- Writing scientific paper
- Meeting with world outstanding scientists
- English practice
- New knowledge in accelerator field
- New friends
- Traveling through accelerators tunnels
- Visiting University of Chicago, Argonne Laboratory
- Traveling around the USA

# Contacts and links

- <http://www.fnal.gov/>
- <http://apc.fnal.gov/PARTI/>
- Summer Internship at Fermilab (USA) 2011  
<http://vkontakte.ru/club20821743>



Questions?