## PHYS 5391 – Section 507

Monday, May 28, 2002 Jaehoon Yu

- 1. Basic Information
- 2. Session Organization
- 3. Goals in these sessions



## Information & Communication Source

- All information on agenda of each session and any reading assignment will be posted on my web page: <u>http://wwwhep.uta.edu/~yu</u>
- Session time slot and room:
  - 12:30 3:00pm, Mondays, Rm 200
  - − 11 week course during the summer → Continued beyond the summer, as group meetings
- Sessions are organized in seminar format
  - One or two featured speakers
    - Mixture of Students, postdocs, and faculty
    - Slides must be prepared in electronic form for FNAL folks prior to the session
  - 5 minutes progress report and plan from each student
- Have office hours, in case you need to talk
  - 3:00pm 5:00pm Mondays
  - 10:30 12:00pm Tuesdays



## The goals

- Necessary to keep up with what is happening within the group
  - Students, postdocs, and faculty need to exchange ideas and information
  - Students need guide through their analyses and other tasks
  - To keep up with what is happening in the field
- Understand various techniques in HEP
  - Highly technical but needed for HEP people
  - Exposed to HEP techniques early on for familiarity
  - Learn how some analyses are done
  - Learn various tools exist for HEP tasks
  - Learn specific techniques in DØ analyses
  - Learn what is involved in HEP analyses
  - Learn how some detectors work



## Topics to Cover

- Detector Techniques
  - Photo-detectors and PMTs
  - DØ
  - ATLAS
  - Digital Hadron Calorimeters
- Simulation of Physical Processes
  - Simulation Tools
  - DØ detector simulation
- Computing Techniques
  - Data Reconstruction
  - Data Sharing
  - Grid Application

Physics Concept

 Standard Model Processes
 Supersymmetric Processes

Analysis Tools

 root
 DØ SAM projects

Physics Analysis Techniques

