Comprehensive Exam Information

• Why, What & When
• Preparation
• Taking the exam
• (placement exam)
What, Why & When

• Our chance to check that students have general subject mastery...

• Subjects covered
  - Astronomy & Astrophysics
  - Atomic, Molecular, Optical Physics
  - Condensed Matter Physics
  - Nuclear Physics
  - High Energy Physics
What, Why & When

• Solve 4 problems
  (Turn in solutions to only four problems...)
  - For “physics”
    each subject has 2 problems
    must choose problems in at least 3 subjects
  - For astronomy
    4 problems, these can be all 4 problems solved

• Must pass before start of 3rd year
  - Given at the beginning of each semester
  - Can take each time it’s offered
  - (essentially) all students pass
Preparation

- Questions at the level of our breadth courses: take the courses
- Old exams and solutions available
  http://graduate.physics.sunysb.edu/comprehensive/
- Talk to the students who’ve passed
- One page of handwritten notes...
Administration: Taking the exam

- A couple of months ahead, you’ll receive an email announcement
  - Date, place, etc:
  - Sign up in front office
    Must hand in signed academic honesty form
- Exam: You get one page written sheet of your own design (2 sides) and bring a calculator...
  - Results within one week
- Two levels: Ph.D., masters. Pass at Ph.D.
Administration: Taking the exam

• Usually taken during 2\textsuperscript{nd} year, but in case you’re interested
  – Fall 2012 exam is Aug. 29, 5:30 – 10:00 in Math tower, P131.

For additional information about the exams (general info):
http://graduate.physics.sunysb.edu/guide/index.html#phd_exams
http://graduate.physics.sunysb.edu/comprehensive/
Placement Exam: Aside

• You have received information about the optional Placement Exam
  - used to “test out” of core graduate courses. Most students do not take it...

• Four areas
  - Classical Mechanics, E&M, Quantum Mechanics, and Statistical Mechanics
  - Each area is a “separate” test
  - Level like exams in the 1st year grad courses
  - Must do 2 of 3 problems in a given area.

  Passing level is rather high
Placement Exam: Aside

• This year’s exam
  - Tuesday (Aug. 21)  1:00 – 5:30, P-116
    CM, E&M
  - Wednesday (Aug. 22)  6:00 – 10:30, D-116
    QM, SM

• Please sign up ahead of time (today!)

For additional information about the exams:
http://graduate.physics.sunysb.edu/guide/index.html#phd_exams
http://graduate.physics.sunysb.edu/faq/index.shtml#qual