P661 Superstring Theory

Fall 2004

Lectures : TR 2:55 - 4:25 pm at RF128

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Grader : Homework grading is organized by Louis Leblond

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Prerequisites : Some quantum field theory, QED and general relativity. With some background, one may take this course concurrently with P651 and/or a GR course.

Text : **String Theory I & II** by Polchinski

D-Branes by Johnson

Reference :

Superstring Theory I & II by Green, Schwarz and Witten

A First Course in String Theory by Zwiebach

Homeworks are posted in www.lns.cornell.edu/ tye/p661.html

This course is S & U, no grades.

There will be a weekly homework. Each will be composed of 2 parts:

1) some reading and a few relatively simple problems. This part is for those who have a passing interest in string theory. Part I of each homework is designed to fill in the gaps in the lectures so that one would be able to follow the lectures as the semester goes on. Hopefully, the lectures together with the Part I exercises are self-contained.

2) more extensive and in-depth reading with more exercises. This second part is for those who like to invest more time to the subject. Students with really strong interests should have no difficulty finding additional problems in the textbooks.