Introduction to Riemann Surfaces

Presentations

Date & Time	Presenter	Topic
Fri May 3, 13:15-14:00	Samuel Fromm	Elliptic functions (Section 6.1)
Fri May 3, 14:15-15:00	Tomas Berggren	Steepest descent analysis on Riemann surfaces
Tue May 7, 8:15-9:00	Erik Murray	Weierstrass p-function (Section 6.2)
Tue May 7, 9:15-10:00	Julian Mauersberger	Theta functions (Section 6.3.1)
Tue May 14, 8:15-9:00	Jonatan Rune	The degree-genus formula (Section 7.2.2)
Tue May 14, 9:15-10:00	Vincent Haugdahl	The Uniformization Theorem (Chapter 10)
Fri May 17, 15:15-16:00	Gustav Nilsson	The Riemann–Roch formula (Section 8.2)
Fri May 17, 16:15-17:00	Oskar Berndal	Line bundles and divisors (Section 12.1)

Section numbers refer to the textbook S. Donaldson, *Riemann Surfaces*, Oxford University Press, 2011. You don't have to follow Donaldson's book in your presentation, but the corresponding sections in the textbook are indicated for those who want to look it up.

The written part of the project should be handed in before midnight on Tuesday May 14.

NOTE: The presentations on Fri May 3 will take place in Room F11. The lecture originally scheduled for Tue Apr 30 8:15-10:00 has been cancelled.

Information about the project

The individual project consists of writing a short paper on a topic of choice and an oral presentation. The paper should be between 4 and 8 pages long (assuming font and layout so that one page contains about the same amount of material as one page of Donaldson's book). The oral presentation will consist of giving a 45 minute lecture where you describe your topic to the rest of the class. Your paper will typically be based on the corresponding presentation in Donaldson's book or some other textbook, but should be formulated in your own words and contain some details which are not in the book. For example, a typical project could be based on one of the sections of Donaldson's book and consist of reproducing the material in that section but with details of some of the computations filled in, or with some additional examples included.