## Master of Science in Mathematical and Theoretical Physics String Theory I

Write a report on the role of the Virasoro operators and algebra in String Theory. You may focus on, for example, the role of the Virasoro operators in determining the physical state conditions and their role in determining vertex operators and scattering amplitudes, or you may wish to discuss the No Ghost Theorem.

Your report should be 10–15 pages, in standard report spacing. In your report indicate explicitly which ideas come from existing sources, and if appropriate which are original. You should also make appropriate attribution for all of your sources. The report should not be merely a repetition of the lectures or of standard textbook treatments, but, ideally, should include also original research papers. Your report need not contain original research.