

Master of Science in Mathematical and Theoretical  
Physics  
String Theory I

Write a report on the following topic:

- Vertex operators and scattering amplitudes in open string theory

You should explain and discuss the Veneziano amplitude for four tachyon scattering and some of its generalisations. The construction and role of vertex operators, in these calculations, should also be discussed.

Your report should be 10–15 pages, in standard report spacing. More precisely the report should use an 11 or 12 point font and the pages should have 1 inch margins. 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.