Homework 4: Due at the beginning of class on Friday April 7th

You must write out clear, logical, and complete answers to the homework questions. You may work together on solving the homework problems, but you must write up the final answer on your own.

The scoring of each homework problem will be out of 3 points: 3 points will be given for a complete, 100% correct solution; 2 points will be given for a largely correct (and still clearly explained) solution, 1 point will be given for a poorly explained, incorrect solution. Excellent solutions by students may be photocopied and used as homework solutions available to everyone.

- Midterm Problem 1, (surfaces of revolution)
- Midterm Problem 2, (spaces with torsion)
- Midterm Problem 3, (light cones and light orbit in Black Hole spacetimes)
- Carroll, chapter 5, exercise 3
- Carroll, chapter 5, exercise 4
- Carroll, chapter 5, exercise 5