

Final

Phys 411

November 27, 2018

**Due to my office on Wednesday, December 12 at 10:00 am sharp.
Late submissions will not be accepted.**

**You may not consult any outside resources or work with any other students.
The only resources you may use on this exam are the textbook and lecture
notes.**

1. Carroll, 4.6 (yes, back in chapter 4!)
2. Carroll, 8.1
3. Carroll, 8.2
4. We've studied a lot of spacetimes in this course (flat space, Schwarzschild, Reissner-Nordstrom, Kerr, cosmological constant, etc.). Which is your favorite? Write down the metric and explain why you like it in a couple of sentences. Describe quantitatively at least two aspects of that spacetime that make it particularly interesting. Your complete answer to this question should be a couple of paragraphs and a few equations.