Black Holes and Quantum Info, Fall 2021
Problem Set 4

Due: in lecture Thursday, Oct 28

Reading. Do the reading for each lecture posted on the website.

Problems

1. Show that the near-horizon-limit of the extremal RN black hole is $AdS_2 \times S^2$. (This is basically worked out in QGBH section 11, but work through the details yourself.)

2. Simmons-Duffin TASI lectures exercise 2.1

3. Simmons-Duffin TASI lectures exercise 4.1

4. Simmons-Duffin TASI lectures exercise 6.1