PHYS 480/581
General Relativity

Homework Assignment 11

Due date: Monday 11/9/2026 8pm, submitted electronically on UNM Canvas

Question 1 (4 points).

Moore Problem 14.8 ab

Question 2 (2 points).

Moore Problem 16.2

Question 3 (1 point).

Moore Problem 16.3

Question 4 (1 point).

An extremal non-rotating black hole occurs when $Q^2 = 4\pi G M^2$, where Q is its electric charge and M its mass. Show that such an extremal black hole does not Hawking radiate.