

GEOMETRY SEMINAR

HARI KUNDURI, MEMORIAL UNIVERSITY

WEDNESDAY, MARCH 13, 2013

4:00 PM

HH-3013

GEOMETRIC INEQUALITIES IN RIEMANNIAN MANIFOLDS II

ABSTRACT:

IN THIS SECOND EXPOSITORY LECTURE, THE MOTIVATIONS AND AN OUTLINE OF THE PROOF OF THE RIEMANNIAN PENROSE INEQUALITY WILL BE GIVEN. THIS INEQUALITY PLACES A RIGID LOWER BOUND ON THE MASS OF A CLASS OF RIEMANNIAN MANIFOLDS IN TERMS OF THE AREA OF THEIR INNER BOUNDARIES. I WILL EXPLAIN HOW SUCH BOUNDARIES CAN BE INTERPRETED IN GENERAL RELATIVITY AS CORRESPONDING TO THE PRESENCE OF BLACK HOLES.