

Rosalba Perna – Astronomy seminar – 2/6/2019

Title: Mergers of compact objects in the Gravitational Wave Era

Abstract: The observation of gravitational waves has opened a new, unexplored window onto the Universe. Among the sources of gravitational wave transients, compact objects such as neutron stars (NSs) and black holes (BHs) play the most important role. In this talk, I will focus on the expected gravitational wave signal when two compact objects (NS-NS and NS-BH) in a binary merge. These events are believed to be accompanied by a strong electromagnetic signature in gamma-rays, followed by longer-wavelength radiation. I will discuss what can be learned from the complementary observations of the electromagnetic and the gravitational wave signals during these events.