



ESPCI
Laboratoire PMMH
10 rue Vauquelin, 75231 Paris Cedex 05



Séminaire PMMH

Bureau d'Études

Vendredi 17 mars 2017, 11h00-12h00

Alexandre Le Tiec

Laboratoire de l'Univers et de ses Théories, Observatoire de Paris

General Relativity and Gravitational Waves, 100 years after Einstein

A century ago, Albert Einstein revolutionized our understanding of the nature of space, time and gravitation. His general theory of relativity predicts, in particular, the existence of black holes and gravitational waves. By sheer coincidence, the celebration of general relativity's centennial also marked the first-ever observation, on Earth, of gravitational waves emitted during the coalescence of two stellar-mass black holes. This is the first direct detection of gravitational waves, but also the first experimental proof of the existence of black holes. This historic discovery opens a new era in astronomy, that of gravitational-wave astronomy, which will allow us to unveil the dark side of the Universe.

