

# Séminaire général de l'IPhT

\*\*\*\*\*

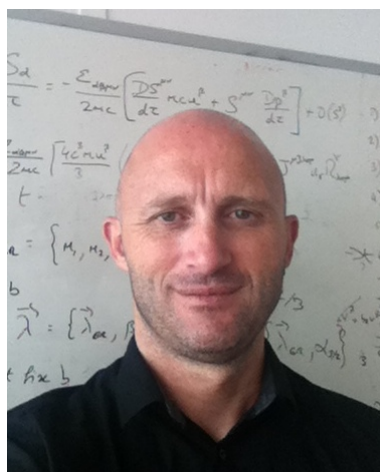
Mardi 06/03/2018, 11h00-12h00

Orme des Merisiers Salle Claude Itzykson, Bât. 774

Implications of the LIGO/Virgo gravitational wave detections for theoretical physics

**Edward K. Porter**

APC



At the end of August 2018, the Advanced LIGO and Advanced Virgo detectors finished their second observation run. As well as further binary black hole mergers, for the first time, a binary neutron star merger was observed. This event was immediately associated with a short gamma ray burst, and with subsequent observations across the electromagnetic spectrum, opened up the field of multi-messenger

In this colloquium, I will provide an overview of the two observation runs, and discuss the implications of the current detections for alternative theories of gravity and neutron star equation-of-state models.

---