Contribution ID: **22** Type: **not specified**

The eve of multimessenger astronomy

Monday, 19 May 2014 09:00 (25 minutes)

Until now, most of the objects in the sky have been studied using solely electromagnetic radiation. Cosmic rays have been detected for more than a century, and their origin(s) is still under debate. Several instruments are in operation or close to completion to study astrophysical sources by non-photonic means, i.e. neutrinos and gravitational waves. This can be considered as the opening of an entire new field, coined « multimessenger astronomy », where both the photonic and the non-photonic data is used to gather information on the Universe and its content.
In this review we will present the processes and objects that can be sources of non-photonic radiation. We will briefly summarize how and with which experiment they can be detected. We will show how the combination of the data provided by the different « messengers » can cast a new light on the physics and on the fundamental mechanisms at play.

Primary author: BOER, Michel (CNRS-ARTEMIS)

Presenter: BOER, Michel (CNRS-ARTEMIS)

Session Classification: Astrophysics/Cosmology