Title: Astroparticle Physics

Lecturer: Dr PALANQUE-DELABROUILLE, N

Date and Times: 4<sup>th</sup> August at 11:15

5<sup>th</sup> August at 09:15 5<sup>th</sup> August at 10:15.

## Summary of the proposed talk

The lectures cover recent topics in astroparticle physics. The first part will consist of a general overview of the field. The next two lectures will cover two specific aspects of astroparticle physics and present the ongoing experiments dedicated to their study:

- high energy astrophysics, large scale cosmic ray detectors, neutrino detectors
- dark matter and dark energy, microlensing experiments, supernovae experiments.

## Prerequisite knowledge and references

Basic knowledge of physics and astrophysics

## Dr Nathalie Palanque-Delabrouille

Since 1997 - Physicist at CEA Saclay, department of Particle Physics

(1994-2003): baryonic dark matter EROS experiment (since 1998): neutrino astrophysics ANTARES experiment (since 2003): cosmology and dark energy SNLS experiment

1997 - PhD from University of Chicago and Doctorat Université Paris 7, with Congratulations of the Jury, Award "Jeunes Chercheurs" Saint GOBAIN of the French Society of Physics

1994 - Master of Science, The University of Chicago, USA Award "Excellence in Teaching of Undergraduates", University of Chicago, USA

1992 - Engineer diploma, Télécom PARIS, France DEA of electronics, Université Paris 6, France, with honors

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