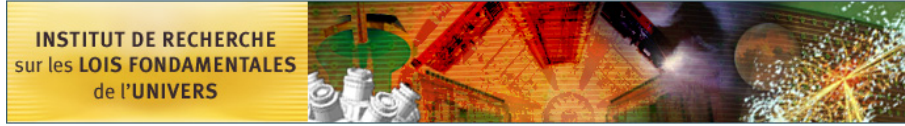


# Service de Physique Nucléaire



## Séminaire

le vendredi 19 Mars 2010 à 11h

CEA Saclay, Orme des Merisiers, Bât. 703, Salle 135

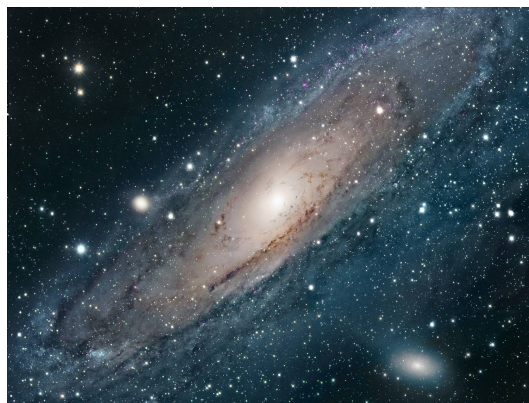
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### Low energy neutrino scattering : from nuclear physics to neutrino (astro)physics.

Cristina Volpe

IPN Orsay

In this talk we will first summarize the present status in neutrino physics and neutrino astrophysics and mention some of the crucial challenges that remain for the future. We will then describe the present status on our knowledge of neutrino-nucleus interactions, the open questions and discuss some of the applications. In fact, neutrino-nucleus scattering at low energies is essential for a variety of timely applications, including key unknown neutrino properties, the detection of the diffuse supernova neutrino background, or furnishing a new constraint to double-beta decay calculations. We will particularly emphasize the need for neutrino-nucleus experiments at future facilities as well as other nuclear physics measurements, that are essential for the progress in these domains.



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*Le café sera servi 10 minutes avant*

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[http://irfu-i.cea.fr/Phocea/Vie\\_des\\_labos/Seminaires/index.php](http://irfu-i.cea.fr/Phocea/Vie_des_labos/Seminaires/index.php)