

Lundi 25 juin 11h00

CEA-Saclay Bat 141, salle André Berthelot

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# The low energy frontier : searches for ultra-light particles beyond the Standard Model

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DESY

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In the recent years theoretical studies and astrophysical observations have confirmed that unknown constituents of our universe like dark matter may find its explanation not only at large-scale experiments at highest energies, but could also show up at the opposite energy scale. In many laboratories worldwide searches for axions, axion-like particles, hidden photons, chameleons or other so-called WISPs with masses below the eV scale are ongoing. Examples at DESY are the experiments ALPS ("Any Light Particle Search") and SHIPS ("Solar Hidden Photon Search"). In these experiments new particles could manifest themselves in a very spectacular manner. Light would apparently shine through thickest walls. The results of a first generation of laboratory and astrophysics experiments will be summarized and plans for future enterprises be discussed.

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Le café sera servi 10 minutes avant.

NB : La présentation d'une pièce d'identité est exigée à l'entrée du centre. Tous les auditeurs extérieurs sont priés de prévenir à l'avance Emilie Chancrin, tél. 01 69 08 23 50, e-mail : [emilie.chancrin@cea.fr](mailto:emilie.chancrin@cea.fr). (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).