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sur les lois fondamentales  
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CEA-Saclay Bat 141, salle André Berthelot

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# The SHIP Facility at the CERN SPS : Progress in 1 Year

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A new general purpose fixed target facility to Search for Hidden Particles (SHiP) at the CERN SPS accelerator provides a unique experimental platform for physics at the Intensity Frontier which is complementary to the searches for New Physics at the Energy Frontiers. The high intensity of the SPS and in particular the large production of charm mesons with the 400 GeV beam allow probing a wide variety of models with light long-lived exotic particles with masses below  $O(10)$  GeV and of SUSY. Moreover, the facility is ideally suited to study the interactions of tau neutrinos. The experimental program of the facility is capable of being extended in the future to include direct searches for Dark Matter and Lepton Flavor Violation. A concise summary of the SHIP physics motivation and potential, detector concepts, schedule, with a special emphasize on the progress achieved during the last year will be presented.

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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 Martine Oger, tél. 01 69 08 23 50, e-mail : [martine.oger@cea.fr](mailto:martine.oger@cea.fr). (U.E. : délai de 24 h, hors U.E. : délai de 4 jours).