

CERN Joint EP/PP Seminars

SPEAKER: William Wester (Fermi National Accelerator Laboratory (USA))

Laser experiments at Fermilab to search for

exotic particles and new properties of space

time

DATE: Mon 12/07/2010 11:00

PLACE: 222-R-001

ABSTRACT

The GammeV laser experiments will be described which have already produced results for a search for low mass axion-like scalar and pseudoscalar particles. A modification of the design of the apparatus has allowed for a search for a chameleon particle - a possible particle candidate for dark energy. New results from GammeV-CHASE, a new dedicated CHameleon Afterglow Search Experiment, will be presented. Future work at Fermilab in this area includes R towards a much more sensitive axion-like particle search as well as a new initiative to test for the holographic nature of space time.

Organised by: Maria SPIROPULU/PH-EP/Guillaume UNAL/PH-EP.....** Tea and

Coffee will be served at 10:30