

SUMMER STUDENT LECTURE PROGRAMME 2018

Lecture Title

Lecturer's name

E-mail Address

Short CV I am a CERN research staff since 2016. I did my PhD in Particle Physics at TRIUMF (Canadian National Laboratory for Nuclear and Particle Physics) on the study of pion decay. After a postdoc, I became CERN fellow in 2013 and have since been working on two experiments at the CERN antiproton decelerator – ASACUSA and AEGIS. Both experiments aim at forming antihydrogen atoms and precisely measure their spectroscopic properties (ASACUSA) and test the effect of gravity on anti-matter (AEgIS).

Lecture Content

What is antimatter and the questions linked to matter-antimatter asymmetry . Low energy antimatter experiments with a focus on the CERN's Antiproton Decelerator experiments : antiproton and antihydrogen studies. Everyday's application of antimatter.

Pre-requisites:
earlier series of lectures
that the students
should follow

Earlier lectures on SM and detection techniques will be helpful

Other pre-requisites:

Knowledge of elementary particles & interactions would help to follow the lectures.