

# SUMMER STUDENT LECTURE PROGRAMME 2018

Lecture Title From raw data to physics results

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Short CV I studied physics at the University of Athens and got my PhD from the University of Geneva in 2008. I then got a postdoc position at UIUC, followed by research fellow and staff researcher positions at CERN. I am currently an assistant professor at the University of Geneva. I am working at the ATLAS experiment, primarily on searches for new physics motivated by supersymmetry, on the trigger system, on reconstruction of hadronic objects and, more recently, on the HL-LHC ATLAS trigger upgrade.

Lecture Content This is an introductory lecture to how particle physicists deal with the detector data to do an analysis. The three lectures will cover the following topics:  
1) Raw data to Physics — step-by-step.  
2) Basic concepts of reconstruction.  
3) Basic concepts of data analysis.

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

Other pre-requisites: It will be assumed that basic concepts of multi-purpose high-energy physics detectors are known. We will be reviewing briefly what is needed.