

Carlo Schiavi

Associate professor

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Education and training

2005

PhD in Physics

Real-time tracking with ATLAS Silicon detectors and its applications to beauty hadron physics

Università degli Studi di Genova - Genova - IT

2001

Master Thesis in Physics

Studio delle caratteristiche funzionali del rivelatore a Pixel di ATLAS e loro impatto sulle prestazioni degli algoritmi di identificazione dei quark b - 110/110 e lode

Università degli Studi di Genova - Genova - IT

1996

High School Diploma (scientific studies)

60/60

Liceo Scientifico Statale E. Fermi - Genova - IT

Academic experience

2017 - ONGOING

Associate Professor

Physics Department - Università degli Studi di Genova - Genova - IT

2011 - 2017

Assistant Professor

Physics Department - Università degli Studi di Genova - Genova - IT

2010 - 2011

Research Assistant

CERN Group of the University of Wisconsin - Geneva - CH

2005 - 2010

Postdoc Fellowship

Physics Department - Università degli Studi di Genova - Genova - IT

Research interests

My research activity was mainly carried out in the context of the following

two international collaborations, operating in the field of experimental physics of fundamental interactions:

- ATLAS (A Toroidal Lhc ApparatuS), starting in 2000
- UTfit (Unitarity Triangle fit), starting in 2003

ATLAS is an experiment designed for the study of proton-proton collisions produced by the LHC (Large Hadron Collider), operating at the CERN (European Organization for Nuclear Research) near Geneva. Its scientific goal is to extend the frontier of knowledge about fundamental interactions, verifying the predictions of the Standard Model and seeking, at the same time, evidence of its possible extensions.

For this purpose, it is equipped with a sophisticated real-time selection system targeting interesting collisions (trigger) and with three large detector systems: inner trackers (Inner Detector, ID), to measure the impulse of charged tracks close to the interaction point; electromagnetic and hadronic calorimeters, to measure the energy of the particles that pass through them or which are absorbed by them; external trackers, for the measurement of the momentum and the identification of the muons emerging the calorimeters.

The UTfit collaboration is formed by a small group of theoretical and experimental physicists, aiming at the analysis and indirect measurement of flavor physics parameters in the Standard Model (Unitarity Triangle, CKM sector), obtained through a combined fit of the data produced by experiments relevant to the sector.

The ultimate goal of this analysis is to try to indirectly highlight the effects of new physics in precision measurements within the Standard Model and is therefore complementary to the main activity in the ATLAS experiment, aimed at direct searches for new physics.

In addition, starting in 2012, I participated in a series of University Research Projects of the University of Genoa, whose main purpose is to exploit the Regional Astronomical Observatory of the Antola Park (Fascia, GE) to produce relevant scientific results in the astrophysics field.