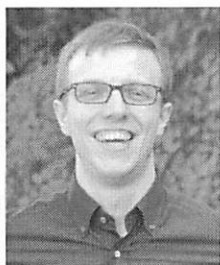


PERSONAL INFORMATION

Riccardo Longo



JOB APPLIED FOR  
POSITION  
PREFERRED JOB  
STUDIES APPLIED FOR

WORK EXPERIENCE

September 2014 – Today

Teaching Assistant at University of Torino

- Teaching Assistant of "Laboratory of advanced technologies in Physics" at Master Course in Complex Systems, University of Torino/Piemonte Orientale, with Prof. Daniele Panzieri;
- Tutor of "Mechanics" at Degree Course in Physics, University of Torino;

Business or sector Teaching of Physics;

January 2014 – June 2014

Laboratory Assistant during the course of "Physics Laboratory II"

- Assistance to the students to do experience about optics and electromagnetism;
- Holders of the course: Prof. Michela Chiosso, [chiosso@to.infn.it](mailto:chiosso@to.infn.it), Prof. Stefania Beolè, [beole@ph.unito.it](mailto:beole@ph.unito.it) ;

Business or sector Teaching of Physics;

1 July 2013 – 20 September 2013

Summer Student

European Center for Nuclear Research (CERN), CH-1211 Geneva 23 Switzerland

<http://home.web.cern.ch>

Supervisor: Dr. Angelo Maggiora, [maggiora@to.infn.it](mailto:maggiora@to.infn.it)

- Use of FLUKA to simulate physics frameworks;
- Simulation of the setup of the COMPASS experiment using FLUKA;
- Analysis of the energy loss and of the multiple Coulombian scattering of the pion beam in the COMPASS target;
- Analysis of the dose accumulated in the COMPASS target in one year of run;
- Simulation of a particular setup used for the irradiation test of the target holder at Bonn (COMPASS internal note 2013-9 submitted on 08/2013);

Business or sector High Energy Particle Physics

September 2010 – Today

Private teacher for High School students

I give private lessons at home to students which have difficulties in Maths and Physics;

- More than 70 students followed among the years.

Business or sector Teaching of Physics;

## EDUCATION AND TRAINING

- |                            |  |
|----------------------------|--|
| September 2009 – July 2012 | <p><b>Bachelor's Degree in Maths and Applications, curriculum Application to Physics</b> <span style="float: right;">Level 6 EQF</span></p> <p>Università degli studi del Piemonte Orientale, Dipartimento di Scienze e Innovazione Tecnologica, Viale Teresa Michel n 11 - 15121 Alessandria, tel: +39 0131360101 - fax: 0039 0131360391</p> <ul style="list-style-type: none"> <li>▪ Average evaluation of the exams : 30/30;</li> <li>▪ Title of the Thesis : "Studio dell'accettazione dei nuovi rivelatori a grande area dell'esperimento COMPASS";</li> <li>▪ Date of graduation: 24/07/2012;</li> <li>▪ Supervisor: Prof. Daniele Panzieri, <a href="mailto:panzieri@to.infn.it">panzieri@to.infn.it</a> ;</li> <li>▪ Co-Supervisor: Dr. Stefano Takekawa, <a href="mailto:takekawa@to.infn.it">takekawa@to.infn.it</a> ;</li> <li>▪ Final Mark 110/110 cum laude (110/110 e lode);</li> </ul>  |
| September 2012 – July 2014 | <p><b>Post Graduate Master's Degree in Physics, curriculum Nuclear and Sub-Nuclear Physics</b> <span style="float: right;">Level 7 EQF</span></p> <p>Università di Torino, Dipartimento di Fisica, Via Pietro Giuria 1, 10125 Torino<br/>Tel.: 0116707480 - Fax: 0116707020, e-mail <a href="mailto:segreteria.df@unito.it">segreteria.df@unito.it</a></p> <ul style="list-style-type: none"> <li>▪ Average evaluation of the exams : 29.92/30;</li> <li>▪ Title of the Thesis : "The Sivers Asymmetry in Drell-Yan processes at COMPASS: study of the experimental apparatus and of different extraction methods";</li> <li>▪ Date of graduation: 22/07/2014</li> <li>▪ Supervisor: Prof. Michela Chiosso, <a href="mailto:chiosso@to.infn.it">chiosso@to.infn.it</a> ;</li> <li>▪ Co-Supervisors: Prof. Daniele Panzieri, Dr. Stefano Takekawa;</li> <li>▪ Final Mark 110/110 cum laude and honour mention (110 e lode con menzione d'onore);</li> </ul> |
| November 2014 - Today      | <p><b>PhD student in Particle Physics</b></p> <p>Università di Torino, Dipartimento di Fisica, Via Pietro Giuria 1, 10125 Torino<br/>Tel.: 0116707480 - Fax: 0116707020, e-mail <a href="mailto:segreteria.df@unito.it">segreteria.df@unito.it</a></p> <p>I'm actually working on the extraction of the Sivers and Boer-Mulders asymmetries from SIDIS and Drell-Yan data, both collected by the COMPASS experiment at CERN. I'm developing a new Monte Carlo chain Geant4 based, in order to correct the data for the effects due to the acceptance of the experimental apparatus.</p>  |

## PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Preliminary English Test					

Levels: A1/2: Basic user - B1/2: Independent user - C1/2 Proficient user  
Common European Framework of Reference for Languages

Communication skills

- Good communication skills gained through my experience as private teacher;

Organisational / managerial skills

- Good attitude to work in complex organizations, as a member of a large collaboration team;
- Experience in the organization of a laboratory dedicated to teaching (at University level);
- Member of the Local Organizing Committee of the first "Conferenza Italiana degli studenti di Fisica (CISF)", 15<sup>th</sup> – 17<sup>th</sup> May 2015;
- Representative of the PhD students in the Physics Department Council (Univeristy of Torino);
- Chair of the AISF Local Committee of Torino (since June 2015);
- Member and chair of the Local Organizing Committee of the second "Conferenza Italiana degli studenti di Fisica (CISF)", 22<sup>th</sup> – 24<sup>th</sup> April 2016

Job-related skills

- Good knowledge of mathematical analysis tools;

Computer skills

- Very good experience in the use of *root* (<http://root.cern.ch/drupal/>) and good knowledge of its programming language;
- Very good knowledge of the C, C++ programming language;
- Very good knowledge of the Physics Analysis Software Tools (PHAST) framework;
- Good knowledge of Geant4 transport code;
- Basic knowledge of FORTRAN77 and Python;
- Good knowledge of cmake;
- Good command of OS, Linux and Windows operative systems;
- Good command of Microsoft Office™ tools;

Driving Licence

- B

---

 ADDITIONAL INFORMATION
 

---

- Publications**
- "FLUKA simulation of the irradiation dose on the Compass PT material holder", COMPASS internal note 2013-10, co-author with A. Maggiora, D. Panziera and G. Milani;
  - "Observation of a new narrow axial-vector meson  $a_1(1420)$ ", co-author (COMPASS collaboration paper);
  - "The spin structure function  $g_1^p$  of the proton and a test of the Bjorken sum rule", co-author (COMPASS collaboration paper);
  - "Interplay among transversity induced asymmetries in hadron leptonproduction", co-author (COMPASS collaboration paper);
  - "Resonance Production and  $\pi\pi$  S-wave in  $\pi^-+p\rightarrow\pi^-\pi^+\pi^+p_{recoil}$  at 190 GeV/c", co-author (COMPASS collaboration paper);
  - "Longitudinal double spin asymmetries in single hadron quasi-real photoproduction at high  $p_T$ ", co-author (COMPASS collaboration paper);
  - "Leading-order determination of the gluon polarisation using a novel method", co-author (COMPASS collaboration paper);
  - "Multiplicities of charged pions and unidentified charged hadrons from deep-inelastic scattering of muons off an isoscalar target", co-author (COMPASS collaboration paper);
- Presentations**
- "FLUKA simulation: irradiation test of the polarised target material holder", Drell-Yan (DY) subgroup meeting, CERN, 16<sup>th</sup> September 2013;
  - "Status of the MC studies: realistic beam implementation and TGeant for DY", DY subgroup meeting, CERN, 10<sup>th</sup> April 2015;
  - "Drell-Yan in TGeant: "status of the art", DY subgroup meeting, CERN, 8<sup>th</sup> May 2015;
  - "New vertex position generation approach in TGeant: First validation", DY subgroup meeting, CERN, 12<sup>th</sup> June 2015;
  - "Status report of TGeant4DY project", DY subgroup meeting, CERN, 25<sup>th</sup> August 2015;
  - "Express analysis", DY subgroup meeting, CERN, 11<sup>th</sup> September 2015;
  - "TGeant status update: resolutions", DY subgroup meeting, CERN, 18<sup>th</sup> November 2015;
  - "Beam properties from 2014 "BMS-run", DY subgroup meeting, CERN, 15<sup>th</sup> January 2016;
  - "First look at 2015 data (W10)", DY subgroup meeting, CERN, 15<sup>th</sup> January 2016;
  - "2014 MC: first look and beam exercise; and 2015 TGeant MC: status", DY subgroup meeting, CERN, 22<sup>th</sup> January 2016;
  - "Drell-Yan: First look at data and MC", COMPASS Analysis Meeting, 27<sup>th</sup> January 2016;
  - "TGeant MC for 2015 DY", DY subgroup meeting, CERN, 9<sup>th</sup> March 2016;
- Conferences**
- Parallel talk at the International Conference of Physics Students (ICPS), "Study of the 3D proton structure", Heidelberg, 11<sup>th</sup> August 2014;
  - Plenary talk at Spin Praha 2015 Conference, "COMPASS Drell-Yan program", Praha, 27<sup>th</sup> July 2015;
  - Talk at the first AISF Particle beers, "Exploring the Nucleon structure @COMPASS", Torino, 20<sup>th</sup> January 2016;
  - Parallel talk at the XII Confinement Conference, "Polarized Drell-Yan @ COMPASS", Thessaloniki, 2<sup>nd</sup> September 2016;
  - Other Conferences attended without direct scientific contribution: "NPQCD 2015" (Cortona, 20<sup>th</sup> – 22<sup>th</sup> April 2015), "IWHSS 2015" (Suzdal, 18<sup>th</sup> – 20<sup>th</sup> May 2015), "The p-He cross section measurement: a physics case from cosmic rays" (Torino, 6<sup>th</sup> – 7<sup>th</sup> July 2015).
- Honours and awards**
- Awarded as best graduated student in the Bachelor's Degree in Maths and Applications for the Academic Year 2011/2012 by the Department of Advanced Science and Technology (Università del Piemonte Orientale, Italy);
- Memberships**
- Associated to the Istituto Nazionale di Fisica Nucleare (INFN), sezione di Torino since 24/06/2013;
  - User at the European Center for Nuclear Research (CERN) since 02/07/2013;
  - Co-founder of Associazione Italiana Studenti di Fisica (AISF) and member of it since its born;
  - Deputy Chief Executive Officer and Local Coordinator of the International Conference of Physics Student 2017;