

PERSONAL INFORMATION

Riccardo Longo



[Redacted email address]

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[Redacted address line 2]

JOB APPLIED FOR POSITION

Teaching Assistant

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 (2015 - 2016);
- Tutor of "Mechanics" at Degree Course in Physics, University of Torino (2015 - 2016);
- Teaching Assistant of "Physics" at Degree Course in Chemistry, University of Torino, with Prof. Mariaelena Boglione (2016 - 2017);

[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, Prof. Stefania Beolè, 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

- 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 2014 – Today

Teaching Assistant at Università del Piemonte Orientale

- Teaching Assistant of "Physics" at Degree Course in Biotechnology , University of Piemonte Orientale, with Prof. Daniele Panzieri;
- Teaching Assistant of "Physics I" at Degree Course in Chemistry , University of Piemonte Orientale, with Prof. Daniele Panzieri;

[Business or sector](#) Teaching of Physics;

EDUCATION AND TRAINING

September 2009 – July 2012

Bachelor's Degree in Maths and Applications, curriculum Application to Physics

Level 6 EQF

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

- Average evaluation of the exams : 30/30;
- Title of the Thesis : "Studio dell'accettazione dei nuovi rivelatori a grande area dell'esperimento COMPASS";
- Date of graduation: 24/07/2012;
- Supervisor: Prof. Daniele Panzieri, panzieri@to.infn.it ;
- Co-Supervisor: Dr. Stefano Takekawa, takekawa@to.infn.it ;
- Final Mark 110/110 cum laude (*110/110 e lode*);

September 2012 – July 2014

Post Graduate Master's Degree in Physics, curriculum Nuclear and Sub-Nuclear Physics

Level 7 EQF

Università di Torino, Dipartimento di Fisica, Via Pietro Giuria 1, 10125 Torino
Tel.: 0116707480 - Fax: 0116707020, e-mail segreteria.df@unito.it

- Average evaluation of the exams : 29.92/30;
- Title of the Thesis : "The Sivers Asymmetry in Drell-Yan processes at COMPASS: study of the experimental apparatus and of different extraction methods";
- Date of graduation: 22/07/2014
- Supervisor: Prof. Michela Chiosso, chiosso@to.infn.it ;
- Co-Supervisors: Prof. Daniele Panzieri, Dr. Stefano Takekawa;
- Final Mark 110/110 cum laude and honour mention (*110 e lode con menzione d'onore*);

November 2014 - Today

PhD student in Particle Physics

Università di Torino, Dipartimento di Fisica, Via Pietro Giuria 1, 10125 Torino
Tel.: 0116707480 - Fax: 0116707020, e-mail segreteria.df@unito.it

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.

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
Preliminary English Test					

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

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)”, 15th – 17th May 2015;
- Representative of the PhD students in the Physics Department Council (Univeristy of Torino);
- Chair of the AISF Local Committee of Torino (June 2015 - September 2016);
- Chair of the Local Organizing Committee of the second “Conferenza Italiana degli studenti di Fisica (CISF)”, Torino, 22th – 24th April 2016
- Member of the Organizing Committee of the XIV International Workshop on Hadron Structure and Spectroscopy (IWHSS 2017), Cortona, 2 - 5 April 2017
- Deputy CEO and Local coordinator of the XXXII International Conference of Physics student, Torino, 7th – 14th August 2017

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;
- Very good knowledge of Geant4 transport code;
- Basic knowledge of FORTRAN77;
- Basic knowledge of Python;
- Very good knowledge of cmake;
- Good command of OS, Linux and Windows operative systems;
- Good command of Microsoft Office™ tools;

Driving Licence

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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. Panzieri 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);
- “Exclusive ω meson muoproduction on transversely polarised protons”, co-author (COMPASS collaboration paper), NPB 915 (2017) 454, hep-ex/1606.03725;
- “Multiplicities of charged kaons from deep-inelastic muon scattering off an isoscalar target”, co-author (COMPASS collaboration paper), PLB 767 (2017) 133, hep-ex/1608.06760;
- “Sivers asymmetry extracted in SIDIS at the hard scale of the Drell-Yan process at COMPASS”, co-author (COMPASS collaboration paper), PBL 770 (2017) 138, hep-ex/1609.07374;
- “Final COMPASS results on the deuteron spin-dependent structure function g_{1d} and the Bjorken sum rule”, co-author (COMPASS collaboration paper), PLB 769 (2017) 034, hep-ex/1612.00620;
- “First measurement of the Sivers asymmetry for gluons from SIDIS data”, co-author (COMPASS collaboration paper), PLB 772 (2017) 854, hep-ex/1612.00620;
- “Polarised Drell-Yan at COMPASS”, EPJ Web Conf. 137 (2017) 05013;
- “Highlights from COMPASS SIDIS and Drell-Yan programs”, NCC 40 (2017), doi: 10.1393/ncc/i2017-17088-3;
- 2 COMPASS analysis release note signed.

Presentations

- More than 30 talks in various COMPASS SubGroup meetings.
- 4 talks at the Analysis Meeting of COMPASS.

Conferences

- Parallel talk at the International Conference of Physics Students (ICPS), “Study of the 3D proton structure”, Heidelberg, 11th August 2014;
- Plenary talk at Spin Praha 2015 Conference, “COMPASS Drell-Yan program”, Praha, 27th July 2015;
- Talk (30’) at the first AISF Particle beers, “Exploring the Nucleon structure @COMPASS”, Torino, 20th January 2016;
- Parallel talk at the XII Confinement Conference, “Polarized Drell-Yan @ COMPASS”, Thessaloniki, 2nd September 2016;
- Seminar (40’) at Università di Torino, “Azimuthal asymmetries in pion-induced Drell-Yan at COMPASS”;
- Seminar (30’) at the first TGeant workshop, “TGeant simulation for the COMPASS DY program”, Freiburg 8 – 10 december 2016;
- Parallel Talk (15’) at 102° SIF Congress, “Highlights from COMPASS SIDIS and Drell-Yan programmes”, Padova, 26 – 30 september 2016. (Talk awarded among the “best communications” of the Congress);
- Plenary Talk (30’) at Excited QCD 2017 Conference, “Polarized Drell-Yan measurements at COMPASS”, Sintra 7-13 may 2017, (https://indico.cern.ch/event/607808/contributions/2582967/attachments/1458946/2252924/Longo_eQCD17_FINAL.pdf);
- Other Conferences attended without direct scientific contribution: “NPQCD 2015” (Cortona, 20th – 22th April 2015), “IWHSS 2015” (Suzdal, 18th – 20th May 2015), “The p-He cross section measurement: a physics case from cosmic rays” (Torino, 6th – 7th 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);
- Awarded with the prize “Carlo Castagnoli” of the Italian Physical Society (2017);

Memberships and Responsibilities

- 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;
- Member of the Italian Physical Society since 2016;
- Deputy Chief Executive Officer and Local Coordinator of the International Conference of Physics Student 2017;
- Responsible of the DY Montecarlo of the COMPASS Collaboration;