

PERSONAL INFORMATION

Seyedfazel Niyazioskouei



Sex | Date of birth | Nationality

WORK EXPERIENCE

22/01/2019–Present

XENONnT commissioning

LNGS : National Gran Sasso Laboratories
Hall di Montaggio (Italy)
www.lngs.it

- Participating in the distillation of Kr & Rn (offline/online) of GXe/LXe for XENONnT
- Cleaning TPC electrodes in CLean room
- Participating in testing the PMTs for XENONnT neutron veto both in water and air
- contribution to the data acquisition analysis of nVETO

30 Oct 2017–1 Dec 2017

student

LAL.in2p3, Paris (France)

Evaluation of novel KEK/HPK N-IN-P pixel sensors for ATLAS Detector upgrade with test beam
(ATLAS-Pixel Tracker Upgrade)

10 Oct 2017–30 Oct 2017

student

LPNH,SACLAY, Paris (France)

Direct illumination calibration of telescope at quantum precision limit

4 Sep 2017–2 Oct 2017

student

IPN & LAL,, Paris (France)

Cosmic rays experiment : Measuring angular distribution and flux of atmospheric muons with plastic scintillators

13 Mar 2018–20 Mar 2018

student

LAL, Paris (France)

Data Analysis, Luminosity of distant galaxies

1 Mar 2017–10 Jun 2017

student

High Energy Astrophysics course project, Ferrara (Italy)

Fast Monte Carlo simulation for the Comptonization of relativistic jets

22 Mar 2014–4 Aug 2015

teacher

ALAVI institute, Tabriz (Iran)

Teaching Fundamentals of Physics and Mathematics for pre-university students

13 Sep 2009–26 Feb 2016

Car Mechanical and Electrical Engineering Technician

www.tuningtalk.com, Tehran (Iran)

- Auto-transmission diagnosis
- Car harness network troubleshooting
- PSA group Petrol engines Technician

EDUCATION AND TRAINING

29/09/2016–13/12/2018

Master's in Physics

Ferrara university, Ferrara (Italy)

www.unife.it

Thesis: Monte Carlo Simulation of the neutron veto tagging efficiency for the XENONnT experiment 9 months Studies:

- Energy Deposition of fast neutrons inside LAB liquid scintillator (neutron veto)
 - Gadolinium loading - Gadolinium de-excitation
 - Compton scattering spectrum (from radiogenic Neutron Capture) in various mediums
 - The photoelectric spectrum of Gadolinium loaded LAB
 - An Improvement of Super Kamiokande model concerning water optical properties for muon veto of the XENONnT
 - Cerenkov emission in water/Gd-water for neutron veto of the XENONnT
- 120 ECTS overall average: 103/110

1 Sep 2017–23 Jul 2018

Master Degree M2 (Double Degree Program) : NPAC: Nuclei, Particles, Astroparticles, Cosmology

Paris SUD university, Paris (France)

Fast Monte Carlo Simulation of Electromagnetic shower development inside a calorimeter (1 month)

Bachelor of Atomic Physics

Shahid Madani Azarbajjan, Tabriz (Iran)

Overall Average : 14.09/20

PERSONAL SKILLS

Mother tongue(s) Azerbaijani

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C1	C1	C2
Italian	B1	B2	A2	B1	B1
Persian	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Job-related skills

- C++ & Python & Root@CERN Advanced level user
- GEANT4@CERN & MONTE CARLO SIMULATION & GitHub Developer and Advanced user
- AUTO CAD MODELING Advanced user
- Machine Learning Medium User
- Following lectures of XENON-BOLOGNA group

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Proficient user	Proficient user	Proficient user

Digital skills - Self-assessment grid

ADDITIONAL INFORMATION

References

Prof. Guido Zavattini (Thesis Supervisor) Email Address: zvtgdu@unife.it - Ferrara University
 Prof. Marco Selvi (Thesis Co-Supervisor) Email Address: Marco.Selvi@bo.infn.it - Bologna University
 Prof. Paolo Natoli Email Address:
 natoli@fe.infn.it - Ferrara University

Publications

Computing Curvature Tensors (Weyl and Ricci) for Gauss-Bonnet Modified Gravity Model (In preparation - from BSc.)

Conferences

- 1.Basic cosmological equation and cosmological parameters.(2016)
2. Cosmic matter budget: Dark Energy, Dark Matter, baryons.(2016)
3. Universe history from beginning to the present time.(2017)
4. Present day or near-present day universe: new discoveries and new mysteries.(2017)
5. Gravitational waves form Black Hole coalescence and related problems.(2018)
6. XENONnT Dark Matter technical meetings (ongoing)

Honours and awards

Winner of Abroad Internship Scholarship from Paris Saclay University (2018)
 Winner of Vinci Scholarship from Universite-Franco-Italienne for Double Degree (2017)
 Member of XENON collaboration (2018)
 Memeber of INFN (2018)
 Member of LNGS (2018)
 Member of OSG American Science Grid (2018)
 Member of Computing Clusters of Chicago University (MIDWAY) (2018)

Research Interests

Dark Matter Phenomenology Direct/Indirect and Accelerator searches for Dark Matter
 Physics Beyond SM Model
 Proton Spin Polarization
 Strong Interactions and Hadrons Deep Inelastic Scattering

Self Declaration

Il sottoscritto dichiara di essere informato ai sensi del d.lgs. n.196/2003 e del GDPR 679/16 – “Regolamento europeo sulla protezione dei dati personali” che i dati personali raccolti saranno trattati anche con strumenti informatici esclusivamente nell’ambito del procedimento per il quale la presente dichiarazione viene resa e per tutti gli adempimenti connessi.

Data 18/04/2019

Firmato Seyedfazel Niyazioskouei