

Giuseppe Scionti

Curriculum Vitae



EDUCATION

- *[thesis defence date to be defined]*
PhD student in Physics
Università della Calabria (Italy)
Thesis: "Monte Carlo neutronic calculations for the design of VESPA shielding at the European Spallation Sources"
I worked on designing the shielding for the VESPA instrument, which will be built at the European Spallation Source (ESS). I performed MCNP simulations and activation calculations for defining the design of the guide shielding as well as for the beam shutter and the cave of the instrument.
- 23 November 2015
Master's degree in Physics [score: 110/110]
Università degli Studi Milano-Bicocca (Italy)
Thesis: "Neutron design for an irradiation module at ESS, for fusion and industrial materials studies"
Fast neutrons at ESS can be used to irradiate samples of materials housed in an irradiation module. I found a suitable position, shape and dimension for this test station, performing MCNP simulations and working together with a mechanical engineer.
- 23 September 2013
Bachelor's degree in Physics [score: 108/110]
Università degli Studi Milano-Bicocca (Italy)
Thesis: "Mapping of the neutronic flux of the TRIGA Mark II reactor of L.E.N.A. in conditions of full power"
I used the neutron activation technique to measure the neutron flux spatial distribution of the TRIGA Mark II reactor core, installed at the University of Pavia (Italy).

WORK EXPERIENCES

- December 2017 – July 2018:
Physics professor assistant for 1st grade student in Physics at **Università della Calabria**.
- February – August 2018:
Math professor assistant for 1st grade student in Materials Science at **Università della Calabria**.
- 02 February – 21 June 2016:
SalesForce **software tester** (quality assurance) for **Reply**, as an external consultant from **Luxhora**.
- 05 May – 31 August 2009:
Green area cleaner at Settimo Milanese (MI) for **Merlin Servizi**.
- 13 October 2008 – 07 November 2008:
2nd level **technical assistance** for business clients for **Vodafone**.

PUBLICATIONS

- "Neutronic Calculations for the Shielding Design of the VESPA Instrument at the European Spallation Source".
Journal of Surface Investigation: X-ray, Synchrotron and Neutron Techniques as the proceedings of the European Conference on Neutron Scattering (ECNS 2019)
Proceeding paper in publication.
- "Measurement and simulation of the neutron flux distribution in the TRIGA Mark II reactor

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core".

Annals of Nuclear Energy (Oxford), 925-936.

DOI:10.1016/j.anucene.2015.07.011

- "The neutron irradiation module at the European Spallation Source ESS".
Journal of Physics: Conference Series.
DOI :10.1088/1742-6596/1021/1/012054

SKILLS

- MCNPX, MCNP6.1, MCNP6.2 simulations
- CINDER calculations
- ADVANTG calculations
- ROOT CERN Framework
- C++ language
- LaTeX software
- SSH, FTP and P2P software (like FileZilla)
- Several cloud storage software (MEGA, Dropbox, Google Drive, hubiC)
- UNIX commands
- Several office suites (Microsoft Office, LibreOffice, Google Docs)
- Adobe Photoshop, GIMP
- Linux based distros, Microsoft Windows, macOS, Android
- Email clients and Messaging software (Telegram, Skype, Vidyo, etc)
- HTML, CSS

CONFERENCES, WORKSHOPS, INTERNSHIPS

- 27 October 2018 – 02 December 2019:
Neutronic simulations for VESPA shielding. **European Spallation Source**, Lund, Sweden.
- 22 – 26 October 2018:
MCNP training course organized by the **Nuclear Energy Agency**, Paris.
- 15 – 17 October 2018:
Imaging experiment at **IMAT**, ISIS, UK.
- 10 – 14 September 2018:
Workshop "IKON15". **European Spallation Source**, Lund, Sweden.
- 04 – 13 July 2018:
Summer School "Neutrons for Chemistry and Materials Science Applications". **Ettore Majorana Foundation and Centre for Scientific Culture**, Erice, Italy.
- 02 – 04 May 2018:
Training "Introduction to Scientific and Technical Computing in C++". **CINECA**, Milan, Italy.
- 11 – 15 December 2017:
Training "CombLayer Training". **European Spallation Source**, Lund, Sweden.
- 07 – 08 November 2017:
Workshop "NEUTRONS MATTER - VII International Workshop on Electron-volt Neutron Spectroscopy". **Villa Wolkonsky and Centro Fermi**, Rome, Italy.
- 26 – 29 September 2017:

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- Workshop “IKON13”. **European Spallation Source**, Lund, Sweden.
- *04 – 08 September 2017:*
Workshop “International Workshop on Imaging”. **Villa Monastero**, Varenna, Italy.
 - *02 – 07 July 2017:*
Summer School “Neutron Precession Techniques”. **Ettore Majorana Foundation and Centre for Scientific Culture**, Erice, Italy.
 - *January 2017:*
Traineeship. **European Spallation Source**, Lund, Sweden.
 - *November 2016 – December 2016:*
Traineeship. **European Spallation Source**, Lund, Sweden.
 - *March 2015 – August 2015:*
Erasmus+ Traineeship. **European Spallation Source**, Lund, Sweden.

LANGUAGES

- **Italian:** Native speaker
- **English:** Fluent

HOBBY

- Books. Movies. Music. Studying. Gym. Jogging. Motorbikes. Do-it-yourself. Repairing phone and pc hardware and software. Linux GNOME UI design. C++ programming.

OTHERS

- Software licenses I own: MCNP6.2 + sources, ADVANTG.
- Driving licences: A (motorbike) and B (car).