



Stefano Roberto Soleti

Personal Information

address Queen's Lane, Oxford, OX1 4AR, United Kingdom
mobile phone +44 7763 778908
email stefano.soleti@physics.ox.ac.uk
Skype srsoleti
nationality Italian
date of birth August 1, 1990

Professional History

- 10/2016 – present **Teaching Assistant**, *University of Oxford*, Oxford, United Kingdom.
Graduate Teaching Assistant in the Optics Laboratory course for BSc Physics students.
- 6/2016 **Visitor**, *University of Bern*, Bern, Switzerland.
Assembly and test of the Cosmic Ray Tagger for the MicroBooNE experiment.
- 2/2015 – 8/2015 **Postgraduate fellow**, *INFN - Laboratori Nazionali di Frascati*, Frascati, RM, Italy.
Technology choice for the electromagnetic calorimeter of the Mu2e experiment.
- 7/2015 – 8/2015 **Visitor**, *Fermi National Accelerator Laboratory*, Batavia, IL, USA.
7/2014 – 8/2014 Development of the software framework for the Mu2e experiment: simulation of experimental backgrounds and electronic signals digitization.
- 6/2015 **Guest scientist**, *Paul Scherrer Institut*, Villigen, AG, Switzerland.
Experimental setup and data analysis for the μ ARC and AICap experiments.
- 11/2013–1/2015 **Affiliated student**, *INFN - Laboratori Nazionali di Frascati*, Frascati, RM, Italy.
Software simulation of the calorimeter for the Mu2e experiment at Fermilab and experimental test of a small-size prototype.
- 7/2013–9/2013 **Summer Intern**, *Fermi National Accelerator Laboratory*, Batavia, IL, USA.
Elaboration of a new algorithm for the management of the electronic pile-up for the calorimeter of the Mu2e experiment.

Education

- 2015 – present **Particle Physics, DPhil**, *University of Oxford*, Oxford, United Kingdom.
advisor Dr. Roxanne Guenette
- 2012 – 2014 **Physics, MSc**, *Sapienza - University of Rome*, Rome, Italy.
thesis title *Study of requirements and performances of the electromagnetic calorimeter for the Mu2e experiment at Fermilab*
advisors Prof. Cesare Bini, Dr. Stefano Miscetti, Dr. Ivano Sarra
final grade 110/110
- 2009 – 2012 **Physics, BSc**, *Sapienza - University of Rome*, Rome, Italy.
thesis title *Integrated optical circuits for quantum information (in italian)*
advisor Prof. Paolo Mataloni
final grade 110/110

2009–2014 **Business Fundamentals**, *University College “Lamaro Pozzani”*, Rome, Italy.
final grade Very Good
2004–2009 **High school degree**, *Liceo Scientifico “Leonardo da Vinci”*, Fasano, BR, Italy.
final grade 100/100 *cum laude*

Languages

Italian Mother tongue
English **IELTS certificate**: 7.5 (9 Reading, 8.5 Listening, 6.5 Writing, 6.5 Speaking)
French Reading: good, Listening/Writing/Speaking: fair

Computer Skills

operating system Microsoft Windows, GNU/Linux, Scientific Linux, Mac OS X
office productivity Microsoft Office, Apache OpenOffice, Apple iWorks, \LaTeX
programming C/C++, Python, Java
web programming HTML, XHTML, XML, CSS, Javascript, PHP
scientific software ROOT, gnuplot, OriginLab Origin, Matlab, Mathematica
circuit simulator OrCad PSpice, Cadence Virtuoso
database SQL language, MySQL, PostgreSQL

Publications

Peer-reviewed

Corresponding author

- [1] N. Atanov et al. *Measurement of time resolution of the Mu2e LYSO calorimeter prototype*, Nucl.Instrum.Meth. A812 (2016) 104-111, [arXiv:1509.04468](#) [physics.ins-det].

Proceedings

Corresponding author

- [2] S.R. Soleti, *The Muon Counter System of the MicroBooNE experiment*, eConf C151216 (2016), [arXiv:1604.07858](#) [physics.ins-det].
[3] N. Atanov et al., *Energy and time resolution of a LYSO matrix prototype for the Mu2e experiment*, Nucl.Instrum.Meth. A824 (2016) 684-685.
[4] S.R. Soleti et al., *Characterization of a prototype of the electromagnetic calorimeter for the Mu2e experiment*, Nuovo Cim. C39 (2016) 267.

Co-author

- [5] N. Atanov et al., *Design and status of the Mu2e electromagnetic calorimeter*, Nucl.Instrum.Meth. A824 (2016) 695-698.
[6] M. Angelucci et al., *Longitudinal uniformity, time performances and irradiation test of pure CsI crystals*, Nucl.Instrum.Meth. A824 (2016) 678-680.
[7] N. Atanov et al., *Characterization of a 5x5 LYSO Matrix Calorimeter Prototype*, IEEE Trans.Nucl.Sci. 63 (2016) 2, 596-604.

Not peer-reviewed

- [8] L. Bartoszek, et al. *Mu2e Technical Design Report*, Fermi National Accelerator Laboratory, 2015 [arXiv:1501.05241](#) [physics.ins-det].

Conferences and schools

- 11/2016 **International Workshop on Next Generation Nucleon Decay and Neutrino Detectors**, *IHEP*, Beijing, China.
Cosmic ray reconstruction efficiency with the MicroBooNE detector (poster).
- 7/2016 **International Neutrino Summer School**, *ICISE*, Quy Nhơn, Vietnam.
The Cowan-Reines experiments in a modern perspective.
- 12/2015 **NuPhys 2015: Prospects in Neutrino Physics**, *Barbican Centre*, London, United Kingdom.
The Muon Counter System of the MicroBooNE experiment (poster).
- 4/2015 **High Energy Physics Meetings 2015**, *University of Rome Tor Vergata*, Rome, Italy.
Characterization of a prototype of the electromagnetic calorimeter for the Mu2e experiment (in italian).
- 9/2014 **100° National Congress - Italian Physical Society**, *University of Pisa*, Pisa, Italy.
The Mu2e Electromagnetic Calorimeter (in italian).

Awards and scholarships

- 2016-2017 **Ermenegildo Zegna Founder's Scholarship**
The Ermenegildo Zegna Founder's Scholarship provides scholarships to enable a small number of exceptionally promising Italians to undertake post-graduate studies or research outside Italy.
- 2016-2017 **St Catherine's College Graduate Scholarship**
Scholarship for graduate students in scientific subjects, awarded by the Leathersellers' Company.
- 2016 **St Edmund Hall College Grant**
The St Edmund Hall College Grant is intended to enhance studies for DPhil students. It has been used to attend the MicroBooNE general meeting.
- 2015 **INFN Postgraduate Scholarship**
Scholarship awarded by INFN to recent postgraduates to continue their research for some months after the thesis.
- 2009-2014 **University College "Lamaro Pozzani" scholarship**
Full scholarship (board and lodging in Rome) awarded by Federazione Nazionale Cavalieri del Lavoro to selected university students. Annually renewed.
- 2013 **INFN-Fermilab Summer Student scholarship**
Scholarship awarded by INFN to selected Italian students to spend two months working on particle physics experiments at Fermilab.
- 2013 **Erasmus Scholarship**
Erasmus scholarship at *Pierre and Marie Curie University* in Paris for the academic year 2013/2014. Declined because of concomitant internship at Fermilab.

Experience and Interests in Outreach

- University of Oxford
Marking of the British Physics Olympiad papers.
- Italian Physical Society
Member since 2012.