STEFANO ROBERTO SOLETI

Contact Building 50, Room 6026A

Information Lawrence Berkeley National Laboratory

1 Cyclotron Rd

Berkeley, 94720 CA, United States

Email: roberto@lbl.gov, roberto@soleti.it

Website: https://www.soleti.it GitHub: @soleti

Skype: srsoleti

Position Owen Chamberlain Postdoctoral Fellow

Lawrence Berkeley National Laboratory, Berkeley, CA

Sept. 2019 – present

EMPLOYMENT

Postdoctoral Fellow, Harvard University, Cambridge, MA

Research Fellow, Harvard University, Cambridge, MA

Demonstrator, University of Oxford, Oxford, United Kingdom

Graduate Fellow, INFN Frascati National Laboratories, Italy

Summer Intern, Fermi National Accelerator Laboratory, Batavia, IL

Apr. – Sept. 2019

Sept. 2017 – Mar. 2019

Sept. 2016 – Jan. 2017

Feb. – Sept. 2015

EDUCATION

Ph.D. in Particle Physics, University of Oxford, United Kingdom

Mar. 2019

- Thesis: "Search for a low-energy excess of electron neutrinos in MicroBooNE"
- Advisors: Roxanne Guenette, Alfons Weber

Master (Laurea magistrale) in Physics, Sapienza University of Rome, Italy Jan. 2015

- Thesis: "Study of requirements and performances of the electromagnetic calorimeter for the Mu2e experiment at Fermilab"
- Advisors: Stefano Miscetti, Cesare Bini

Bachelor (Laurea) in Physics, Sapienza University of Rome, Italy

Oct. 2012

RESEARCH EXPERIENCE DUNE (2020 – present)

- Assembly and testing of the pixelated LArTPC prototype for the near detector.
- Leading developer of the near detector simulation framework with GPU algorithms.

Mu2e (2013 – 2015, 2019 – present)

- Monte Carlo samples production manager of the collaboration.
- Cosmic-ray simulation and background estimate.
- Full characterization of the first electromagnetic calorimeter prototype. Three test beams and radiation-hardness tests.

MicroBooNE (2015 – 2019)

- Leading analyzer of the low-energy excess search, main physics goal of the experiment.
- First measurement of cosmic-ray reconstruction efficiency in a LArTPC.
- Data-driven measurement of the space-charge effect with tagged cosmic muons.

Honors & Awards	Owen Chamberlain Fellowship at the Lawrence Berkeley National Laboratory	2019 - 2022
	Ermenegildo Zegna Founder's Scholarship	2015 - 2017
	University of Oxford St Catherine's College Graduate Scholarship	2016 - 2017
	INFN Postgraduate Scholarship	2015
	INFN - Fermilab Summer Student Scholarship University College "Lamaro Pozzani" Scholarship	2013 $2009 - 2014$
	Chrycistry Conege Lamaro i Ozzam Scholarship	2003 2014
Professional	Simon Fraser University GPU Hackathon	2021
ACTIVITIES	Computational and Data Science Training for High Energy Physics, Princeton Ur	-
	International Neutrino Summer School, ICISE, Vietnam	2016
OUTREACH	Nuclear Science Day for Scouts at the Lawrence Berkeley National Laboratory	2021
	Developer and maintainer of a neutrino preprints Twitter bot @nuarxiv	2020
	Re-design of the MicroBooNE collaboration website https://microboone.fnal	$\begin{array}{cc} {\sf .gov} & 2017 \\ 2015 - 2016 \end{array}$
	Marking of British Physics Olympiads papers Orientation and welcoming events at the University of Oxford	2015 - 2016 $2015 - 2016$
	orientation and welcoming events at the emveloping of emercia	2010 2010
TEACHING & TUTORING	Supervisor of two students at the University of California - Berkeley for the undergraduate	
	academic research project	2021
	Tutor of one student for the Harvard University summer student program	2018
	Demonstrator in the Optics laboratory of the University of Oxford	2017
	Tutor of one student for the University of Oxford summer student program	2017
Conference Presentations & Talks	9. APS April Meeting 2021	Apr. 2021
	8. PHYSTAT-nu 2019, CERN, Switzerland	Jan. 2019
	7. Neutrino 2018, Heidelberg, Germany	June 2018
	6. MASS 2018, University of Southern Denmark, Odense, Denmark	May 2018
	5. DPF 2017, Fermilab, United States	July 2017
	4. NNN 2016, IHEP, Beijing, China	Nov. 2016
	3. NuPhys 2015, Queen Mary University, London, United Kingdom	Dec. 2015
	2. IFAE 2015, University of Rome Tor Vergata, Rome, Italy	Apr. 2015
	1. SIF National Congress, University of Pisa, Pisa, Italy	Sept. 2014