STEFANO ROBERTO SOLETI

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Information Lawrence Berkeley National Laboratory

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POSITION Owen Chamberlain Postdoctoral Fellow

Fellow Sept. 2019 – present

Lawrence Berkeley National Laboratory, Berkeley, CA

EMPLOYMENT Postdoctoral Fellow, Harvard University, Cambridge, MA Apr. – Sept. 2019

Research Fellow, Harvard University, Cambridge, MA

Sept. 2017 – Mar. 2019

Graduate Fellow, INFN Frascati National Laboratories, Italy

Feb. – Sept. 2015

Summer Intern, Fermi National Accelerator Laboratory, Batavia, IL

July – Sept. 2013

EDUCATION Ph.D. in Particle Physics, University of Oxford, United Kingdom March 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 January 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 October 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 $2009 - 2014$	
	University Conege Lamaro i ozzani Scholarship	2009 - 2014	
Professional	Simon Fraser University GPU Hackathon	2021	
ACTIVITIES	Computational and Data Science Training for High Energy Physics, Princeton University 2019		
	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	•	
	Marking of British Physics Olympiads papers Orientation and welcoming events at University of Oxford	$2015 - 2016 \\ 2015 - 2016$	
TEACHING & TUTORING	Supervisor of Ryan Everly and Randy Wang (University of California - Berkeley dergraduate academic research project Tutor of Jiayu Jiu (Jilin U.) for the Harvard summer student program Demonstrator in the Optics laboratory of the University of Oxford Tutor of Monika Venčkauskaité (Vilnius U.) for the Oxford summer student program	2021 2018 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	