**Personal Information**

* E.mail: fausto.casaburo@roma1.infn.it (institutional) fausto.casaburo@uniroma1.it (institutional)

**Qualification**

* **November 2018- Present:** PhD student in “*Accelerator Physics”,* with scholarship,at University “La Sapienza” of Rome (Italy).
* **2016:** Master degree in “*Nuclear and Subnuclear Physics”* at University “La Sapienza” of Rome (Italy). Thesis title: “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*”about the experiments “*Large High Altitude Air Shower Observatory (LHAASO)*” and “*Cherenkov Telescope Array (CTA)*”.
* **2013:** Bachelor degree in “*Physics*” at University “La Sapienza” of Rome (Italy). Thesis title: “*Thermal model study about Mercury surface for the BepiColombo mission*”.
* **2006:** Scientific High School diploma experimental course “*National Computer Science Program*” at Scientific and Classical High School “G. Galilei” in Piedimonte Matese (Italy).

**Job Experience**

* **November 2019- Present:** Tutor of Physics at Grammar High School “*Pilo Albertelli”* of Rome (Italy) and at Scientific High School *“Dante Alighieri”* of Anagni (Italy) for the Lab2Go project, organized by the “*National Institute Nuclear Physics (INFN)”* subdivision Roma 1.
* **October 4, 2019- Present:**  Physics and Math professor at High School *“Tommaso Salvini”* in Rome (Italy), on leave due to PhD course.
* **November 2018- Present:** PhD student for the “*National Institute Nuclear Physics (INFN)”* subdivision Roma 1 working to the project “*Low EMittAnce muon collider*”.
* **November 15, 2017- October 31,2018:** Scientific research scholarship about *“Study of chemical and physical features of manufactured and not manufactured nanomaterials, by transmission electron microscopy”* at scientific research centre of “*National Institute for Insurance against Accidents at Work (INAIL)*” in Monte Porzio Catone (Italy)

**Further studies**

* **2019:** “*10th European Summer School on Experimental Nuclear Astrophysics*”, with full scholarship to attendi it, organized by “*Southern National Laboratories (LNS)-National Institute for Nuclear Physics (INFN)“*, at LNS in Catania (Italy), June 16-23, 2019.
* **2019:** Exam “*History of Pedagogy”,* at University of Rome “La Sapienza”. It’s valid for the 24 ECTS regarding of anthropologycal- psychological- pedagogical- educational disciplines required by Italian law to teach in Middle and High School. . Final grade 30 et laudem/30
* **2019:** “*Joint Universities Accelerator School (JUAS)*” course “ *The technology and applications of particle accelerators”* organized by “*European Scientific Institute (ESI)“*, at ESI, Archamps (France), February 11- March 10, 2019;
* **2018:** “*International School for AstroParticle Physics (ISAPP)*” course “*- LHC meets Cosmic Rays”*  with full scholarship to attendi it, organized by “*COsmic Ray SImulations for KAscade (CORSIKA)“* collaboration in collaboration with “*Conseil Européen pour la Recherche Nucléaire (CERN)*” at CERN, Geneva (Switzerland), October 28- November 2, 2018;
* **2018:** “*Pisa School on Future Collider 2018*” with full scholarship to attendi it, organized by University of Pisa in Pisa (Italy), September 17-21, 2018;
* **2018:** “*CERN Accelerator School (CAS)”,* course: “*Beam Dynamics and technologies for future colliders*” with full scholarship to attend it, organized by the “*Conseil Européen pour la Recherche Nucléaire (CERN)*” in collaboration with “*Paul Scherrer Institute (PSI)*” in Zurich (Switzerland), February 21 – March 6, 2018.
* **2017:** Course “*Nuclear Reactor Physics Basics*” organized by the “Moscow Engineering Physics Institute” of Moscow (Russia) on the telematic network www.edx.org . Final Grade 100%.
* **2017:** Summer School “*Hadron Collider School (HASCO) 2017*” at University “Georg- August” of Gottingen (Germany), organized by the Physics department of at University “Georg- August”, July 16-21, 2017.
* **2017:** International School of Physics – Enrico Fermi, course 199 “*Physics of and Science with X-Ray Free Electron Lasers*” with full scholarship to attend it, organized by the “*Italian Physical Society (SIF)*” in Varenna (Italy), June 26 – July 1, 2017.

**Speaker during workshop, conferences and seminars**

* **2019:** Speaker during the meeting “57th *International Winter Meeting on Nuclear Physics*”, January 21 – 25, 2019 in Bormio (Italy)”. Admission to attend the meeting with full grants. Oral presentation of “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*”.
* **2017:** Speaker during the “*103° National Conference of Italian Physical Society*” in Trento (Italy) September 11-15, 2017. Oral presentation of “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*”.

**Attendance to workshop, conferences and seminars**

* **2019:** Attendance to the workshop “***Muon Collider***” organized by “*Conseil Européen pour la Recherche Nucléaire (CERN)*” at CERN, Geneva (Switzerland), October 9-11, 2019;
* **2019:** Attendance to the workshop “***Optical and Quantum Communication***” organized by Italian Space Agency (ASI) and European Space Agency (ESA) at ASI in Rome (Italy), July 02,2019.
* **2018:** Attendance to the conference “***DAFNE as Open Accelerator Test Facility in year 2020***” at Frascati National Laboratories (LNF) in Frascati (Italy), December 17, 2018.
* **2018:** Attendance to the workshop “***Physics with Industry 2018***” at Lorentz Center di Leiden in Leiden (Holland), November 26 -30, 2018; member of the winner team for the best problem solution.
* **2018:** Attendance to the workshop “***Discussion on muon collider challenges @ INFN***” University of Pisa in Pisa (Ity), November 21, 2018;
* **2017:** Attendance to the conference “*Nanomaterials between scientific knowledge evolution and regulatory aspects*” at “National Health Institute” in Rome (Italy) January 25, 2018.
* **2017:** Attendance to the conference “*Physical-chemical characterization of Nanomaterials: applications in medical, cosmeti and food farming fields*” at “National Health Institute” in Rome (Italy) December 05, 2017.
* **2016:** Attendance to the guided visit of the “*European Organization for Nuclear Research (CERN)* ” in Geneva (Switzerland) organized by the “*CERN*”, December 13, 2016.
* **2013:** Attendance to the educational seminar “*Higgs Boson History: from the theoretical ipothesys to the experimental evidence*” at Civic Planetary “*Ulrico Hoepli*” in Milano (Italy), November 07, 2013.
* **2005:** Attendance to the educational seminar “*Synchrotron Light, Physical Aspects of radioprotection, Physics and cultural heritage preservation*” at Scientific and Classical High School “G. Galilei” in Piedimonte Matese (Italy), May 13, 2005.

**Certifications**

* **2015:** Computer Science Certificate “*European Informatics Passport 7 modules (EIPASS)*” released by “*Issuer Corporation of the International certfication programs of digital competence EIPASS (CERTIPASS)*”.

**Professional Memberships**

* **November 2018- Present:** Member of “*National Nuclear Physics Institute (INFN)*”, subdivision Roma 1 (Italy).
* **November 15, 2018 – October 31, 2018 :** Member of “*National Institute for Insurance against Accidents at Work (INAIL)*” subdivion of Monte Porzio Catone (Italy);
* **March 2016- February 2017:** Member of “*National Nuclear Physics Institute (INFN)*”, subdivision Roma 1 (Italy).
* **2013- Present:** Member of “*Italian Physical Society (SIF)*”.

**Languages**

* Italian (mother tongue).
* English.

**Used programming languages and physics/math used software**

* C, C++, Turbo Pascal, ROOT, Origin, Gnuplot, Geogebra, MatLab, Mathematica

**Further used software**

* Pinnacle Studio, Adobe Premiere, Adobe Photoshop, AutoCAD, Office (Word, Excel, Power Point), ecc.

**Author of Abstracts**

* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the “*35th International Cosmic Rays Conference (ICRC) 2017*”, July 12-20, 2017 in Bexco (Soth Korea).
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the “*15th Topics in Astroparticle and Underground Physics (TAUP) 2017*”, July 24-28, 2017 in Subdury (Canada).
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the “*103° National Conference of Italian Physical Society*”, September 11-15, 2017 in Trento (Italy)”.
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the conference “*AstroParticle Physics (APP) and High Energy Particle Physics (HEPP)*” organized by the “*Institute Of Physics (IOP)”*, March 26-28, 2018 in Bristol (UK)”;
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the conference “*4th International Conference on Astrophysics and Particle Physics*”, December 03-05, 2018 in Chicago (USA)”;
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the conference “*4th International Conference on new Frontiers in Physics (ICNFP)*”, July 03-12, 2018 in Creta (Greece)”;
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the school “*International School on AstroParticle Physics (ISAPP) – LHC meets cosmic rays*”, October 29 – November 2, 2018 at CERN in Geneva (Switzerland)”;
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the meeting “57th *International Winter Meeting on Nuclear Physics*”, January 21 – 25, 2019 in Bormio (Italy)”;

**Author of Proceedings**

* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the “*35th International Cosmic Rays Conference (ICRC) 2017*”, July 12-20, 2017 in Bexco (Soth Korea). Published on “*Proceeding of Science*” [https://pos.sissa.it/301/847/](https://pos.sissa.it/301/847/%20) .

**Author of Scientific Poster**

* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the “*15th Topics in Astroparticle and Underground Physics (TAUP) 2017*”, July 24-28, 2017 in Subdury (Canada);
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the **:** “*International School for AstroParticle Physics (ISAPP)*” course “ *LHC meets Cosmic Rays”* at *“Conseil Européen pour la Recherche Nucléaire (CERN)*”, Geneva (Switzerland), October 28- November 2, 2018;
* “*Detection of primary photons in high energy cosmic rays using Cherenkov imaging and surface detectors*” for the meeting “57th *International Winter Meeting on Nuclear Physics*”, January 21 – 25, 2019 in Bormio (Italy)”;

**Further job-releated experiences**

* **2017:** Winner of the on line competition “*Science for everyone (SxT)*” organized by “*National Nuclear Physics (INFN)*” on scienzaperutti.infn.it, December 14, 2017.
* **2017:** Winner of the on line competition “*Science for everyone (SxT)*” organized by “*National Nuclear Physics (INFN)*” on scienzaperutti.infn.it, November 28, 2017.
* **2017:** Winner of the on line competition “*Science for everyone (SxT)*” organized by *“National Nuclear Physics (INFN)*” on scienzaperutti.infn.it, October 17, 2017.
* **2005:** Competitor in the regional phase of “*Chemistry Olympics*” dedicated to High School students during the scholastic year 2004-2005 in Naples (Italy) to represent the Scientific and Classical High School “G. Galilei” of Piedimonte Matese (Italy).
* **2004:** Competitor in the provincial phase of “*Math Olympics*” dedicated to High School students during the scholastic year 2003-2004 in Caserta (Italy) to represent the Scientific and Classical High School “G. Galilei” of Piedimonte Matese (Italy).

**Other Memberships**

* **2007- Present:** Member of “*Register of Polling Station Presidents*”, Municipality of Ailano (Italy).
* **2001- 2006:** Member of civil protection “*Euroafi Codacons*”, Municipality of Ailano (Italy).
* **2001- 2006:** Member of cultural association “*Pro-Loco Aebutianum*”, Municipality of Ailano (Italy).

**Polling station experiences**

* **2011- 2019:** President of the Polling Station, Municipality of Ailano (Italy).
* **2014-2019:** President of Assembly of the Polling Station Presidents, Municipality of Ailano (Italy).
* **2009- 2010:** Secretary of the Polling Station, Municipality of Ailano (Italy).

**Further information**

* **2005:** Competitor for the Italian TV show “*Per un pugno di libri*” dedicated to High School students, trasmitted on RAI 3 on December, 18, 2005 to represent the Scientific and Classical High School “G. Galilei” of Piedimonte Matese (Italy).
* **2004-2005:** Student spokeperson of the Institute Assembly, during the scholastic year 2004-2005, Scientific and Classical High School “G. Galilei” of Piedimonte Matese (Italy).
* **2003-2004:** Student spokeperson of the Class Assembly III C, during the scholastic year 2003-2004, Scientific and Classical High School “G. Galilei” of Piedimonte Matese (Italy).

*In compliance with the Italian Legislative Decree no. 196 dated 30/06/2003, I hereby authorize the*

*recipient of this document to use and process my personal details for the purpose of recruiting and*

*selecting staff and I confirm to be informed of my rights in accordance to art. 7 of the above mentioned decree.*

November 18,2019.