

Alessio Caminata

Curriculum Vitae

Dati personali

o Nome e cognome: Alessio Caminata

Ricerca

- 2017 – oggi **Ricercatore di terzo livello INFN presso la sezione di Genova.**
- 2014 – 2017 **Assegno di ricerca I.N.F.N. presso la Sezione di Genova.**

Studi

- 2011 – 2013 **Dottorato di Ricerca in Fisica, Università degli Studi di Genova.**
Titolo conseguito il 12/03/2014.
- 2008 – 2010 **Laurea Specialistica in Fisica, Università degli Studi di Genova,**
voto finale: 110/110 con lode.
Titolo conseguito il 30/09/2010.
- 2005 – 2008 **Laurea in Fisica, Università degli Studi di Genova,**
voto finale: 110/110 con lode.
Titolo conseguito il 07/10/2008.
- 2005 **Maturità scientifica, Liceo Leonardo da Vinci, Genova,**
voto finale: 100/100.
Titolo conseguito il 07/07/2005.

Ruoli scientifici ricoperti

- 2019 - oggi Chair Steering Committee dell'esperimento Borexino
- 2017 - oggi Membro Steering Committee dell'esperimento Borexino
- 2017 - oggi L2 manager dell'esperimento DarkSide - Responsabile sviluppo del Veto dell'esperimento
- 2018 - oggi Coordinatore dell'R&D PESCE INFN Grant - 19593
- 2014 - oggi Responsabile dell'attività di sviluppo del codice di simulazione dell'esperimento Borexino;
- 2017 - 2019 Shift coordinator dell'esperimento CUORE
- 2015 - 2016 Responsabile attività per lo studio di un possibile upgrade hardware di Borexino in vista dell'inizio dell'esperimento SOX;
- 2016 Responsabile per l'utilizzo delle risorse del centro di calcolo CNAF per l'esperimento Borexino/SOX.

Ruoli di gestione fondi ricoperti

- 2019 - oggi Responsabile locale dell'esperimento DarkSide - 41 k€
2018 - oggi Coordinatore del progetto PESCE (INFN Grant - 19593) - 80 k€
2018 Responsabile locale dell'esperimento Borexino - 704 k€

Grant

- 2018 INFN Grant - 19593, PESCE R&D

Attività didattica

- 2018 – 2019 **Professore a contratto**, *Geologia*, Università degli studi di Genova.
Corso di Fisica Sperimentale e Fisica Sperimentale con Applicazioni al Sistema Terra. Argomenti dei corsi: introduzione alla meccanica classica (punto materiale, corpo rigido e gravitazioni), all'elettromagnetismo ed alla termodinamica. Elementi di propagazione delle onde nel vuoto e nei mezzi e elementi di ottica geometrica. Numero di ore complessive: 60.
- 2013 – 2014 **Esercitatore di Fisica Generale**, *Dipartimento di Ingegneria Civile, Chimica e Ambientale*, Università degli Studi di Genova.
- 2012 – 2013 *Ambientale*, Università degli Studi di Genova.
- 2011 – 2012 L'attività svolta ha riguardato il supporto agli studenti nello svolgimento di esercizi numerici loro proposti con particolare attenzione nell'introdurre gli studenti al *problem solving* nella fisica. Il supporto ha riguardato, in particolar modo, lo svolgimento di esercizi sia di meccanica (a.a. 2013/14) sia di elettromagnetismo nel vuoto. Numero di ore complessive: 30 ore (a.a. 2013/14), 40 ore (a.a. 2012/13) e 30 ore (a.a. 2011/12). Ho partecipato, inoltre, alla Commissione d'esame in qualità di Cultore della Materia.
- 2011 **Tutor didattico**, *Facoltà di Scienze M.F.N.*, Università degli Studi di Genova.
Ripetizione di teoria ed esercizi di fisica rivolti agli studenti del primo anno del Corso di Laurea in Chimica. Gli argomenti svolti hanno compreso sia elementi di meccanica (del punto, del corpo rigido e della gravitazione universale) che di elettromagnetismo (nel vuoto e nella materia). Numero di ore complessive 39.

Divulgazione

- 2019 **Tutorato**, *Stage degli studenti liceali*, Dipartimento di Fisica dell'Università degli Studi di Genova, Progetto Lauree Scientifiche.
L'attività ha previsto l'introduzione alla fisica delle particelle ed in particolare all'interazione radiazione materia e l'utilizzo di rivelatori nella fisica ad alte energie. Gli studenti sono stati guidati durante la realizzazione di un piccolo telescopio per raggi cosmici basato su scintillatori plastici e silicon photonmultiplier. Numero di ore 20.)
- 2018 **Festival della Scienza**, *Laboratorio: I raggi cosmici in un'app*.
- 2018 **Presentazione a Pint of Science**, *Alla ricerca di nuova fisica con il metro cubo più freddo dell'Universo*.
- 2017 **Lezione presso l'Università della terza età - UniTE**, *Rivelare Neutrini Solari: come studiare le proprietà della nostra stella attraverso particelle elusive.*

- 2014 **Tutorato**, *Stage degli studenti liceali*, Dipartimento di Fisica dell'Università degli Studi di Genova, Progetto Lauree Scientifiche.
- 2013
- 2012 L'attività ha previsto l'introduzione, il supporto nella calibrazione di un rivelatore a scintillazione utilizzato per indagare l'effetto Compton e la realizzazione di un esperimento atto a rivelare tale effetto (anni 2012 e 2014). Nel 2012, l'attività ha previsto, inoltre, una presentazione sulla fisica delle particelle, dalle basi sino agli esperimenti in corso presso LHC. Nell'anno 2013 l'attività ha riguardato l'introduzione alle equazioni della meccanica relativistica (cinematica ed urti) ed al modello atomico di Bohr. L'attività ha previsto, inoltre, una presentazione riguardante l'introduzione ai fenomeni quantistici ed in particolare al dualismo onda-particella. Numero di ore: 20 (dal 12 al 30 Marzo 2012), 40 (dall'11 al 22 Febbraio 2013), circa 20 (dal 27 al 30 Gennaio 2014, a titolo gratuito).

Ricerca all'estero

- 8/2012 – **Research Fellowship**, University of Southern California-Children's Hospital Los Angeles.
- 12/2012

- 1) Improved Limit on Neutrinoless Double-Beta Decay in ^{130}Te with CUORE
By CUORE Collaboration (D.Q. Adams et al.).
arXiv:1912.10966 [nucl-ex].
- 2) Results from the CUORE experiment
By CUORE Collaboration (Laura Marini et al.).
[10.22323/1.332.0055](#).
PoS HQL2018 (2018) 055.
- 3) Results on geoneutrinos at Borexino
By Borexino Collaboration (Davide Basilico et al.).
[10.22323/1.332.0052](#).
PoS HQL2018 (2018) 052.
- 4) Results from the CUORE experiment
By A. Campani et al..
[10.1393/ncc/i2019-19177-7](#).
Nuovo Cim. C42 (2019) no.4, 177.
- 5) DarkSide: Latest results and future perspectives
By DarkSide Collaboration (B. Bottino et al.).
[10.1393/ncc/i2019-19180-0](#).
Nuovo Cim. C42 (2019) no.4, 180.
- 6) First Results from CUORE
By CUORE Collaboration (C. Tomei et al.).
Conference: [C18-03-10](#), p.327-332 [Proceedings](#)
- 7) New Physics Results from DarkSide-50
By D. Franco et al..
Conference: [C18-03-10](#), p.195-200 [Proceedings](#)
- 8) Results from the CUORE experiment
By N. Moggi et al..
[10.1393/ncc/i2019-19077-x](#).
Nuovo Cim. C42 (2019) no.2-3-3, 77.
- 9) DarkSide status and prospects
By DarkSide Collaboration (S. Sanfilippo et al.).
[10.1393/ncc/i2019-19079-8](#).
Nuovo Cim. C42 (2019) no.2-3-3, 79.
- 10) Comprehensive geoneutrino analysis with Borexino
By Borexino Collaboration (M. Agostini et al.).
arXiv:1909.02257 [hep-ex].
- 11) Search for low-energy neutrinos from astrophysical sources with Borexino
By Borexino Collaboration (M. Agostini et al.).
arXiv:1909.02422 [hep-ex].
- 12) Results from Borexino on solar and geo-neutrinos
By Borexino Collaboration (Daniele Guffanti et al.).
[10.22323/1.340.0007](#).
PoS ICHEP2018 (2019) 007.
- 13) Measurement of the ion fraction and mobility of ^{218}Po produced in ^{222}Rn decays in liquid argon
By DARKSIDE Collaboration (P. Agnes et al.).
arXiv:1907.09332 [astro-ph.IM].
[10.1088/1748-0221/14/11/P11018](#).

JINST 14 (2019) no.11, P11018.

14) CUPID pre-CDR

By CUPID Collaboration (W.R. Armstrong et al.).

arXiv:1907.09376 [physics.ins-det].

15) CUORE: The first bolometric experiment at the ton scale for rare decay searches

By D.Q. Adams et al..

[10.1016/j.nima.2018.11.073](https://doi.org/10.1016/j.nima.2018.11.073).

Nucl.Instrum.Meth. A936 (2019) 158-161.

16) Front-end electronic system for large area photomultipliers readout

By B. Bottino, A. Caminata, M. Cariello, M. Cresta, S. Davini, P. Musico, M. Pallavicini, G. Testera.

[10.1016/j.nima.2018.08.109](https://doi.org/10.1016/j.nima.2018.08.109).

Nucl.Instrum.Meth. A936 (2019) 325-326.

17) Review on Solar Neutrino Studies Borexino

By I. Drachnev et al..

[10.1142/9789811202339_0004](https://doi.org/10.1142/9789811202339_0004).

18) Results of CUORE

By CUORE Collaboration (S. Dell'Oro et al.).

arXiv:1905.07667 [nucl-ex].

19) Recoil Directionality Experiment

By ReD Working Group (S. Sanfilippo et al.).

[10.1051/epjconf/201920901031](https://doi.org/10.1051/epjconf/201920901031).

EPJ Web Conf. 209 (2019) 01031.

20) Monte Carlo simulation in solar neutrino experiments

By A. Caminata.

[10.1142/9789811204296_0026](https://doi.org/10.1142/9789811204296_0026).

21) Limit on the effective magnetic moment of solar neutrinos using Borexino data

By BOREXINO Collaboration (A. Vishneva et al.).

[10.1142/9789811204296_0018](https://doi.org/10.1142/9789811204296_0018).

22) Solar neutrino spectroscopy in Borexino

By M. Wurm et al..

[10.1142/9789811204296_0016](https://doi.org/10.1142/9789811204296_0016).

23) Perspectives for CNO neutrino detection in Borexino

By D. Guffanti et al..

[10.1142/9789811204296_0017](https://doi.org/10.1142/9789811204296_0017).

24) Constraints on Non-Standard Neutrino Interactions from Borexino Phase-II

By Borexino Collaboration (S.K. Agarwalla et al.).

arXiv:1905.03512 [hep-ph].

25) The CUORE cryostat: An infrastructure for rare event searches at millikelvin temperatures

By C. Alduino et al..

arXiv:1904.05745 [physics.ins-det].

[10.1016/j.cryogenics.2019.06.011](https://doi.org/10.1016/j.cryogenics.2019.06.011).

Cryogenics 102 (2019) 9-21.

26) Recent results on pp-chain solar neutrinos with the Borexino detector

By Borexino Collaboration (Lino Miramonti et al.).

arXiv:1901.09965 [hep-ex].

27) Results from the Cuore Experiment

By Alessio Caminata et al..
[10.3390/universe5010010](https://doi.org/10.3390/universe5010010).
Universe 5 (2019) no.1, 10.

28) Solar Neutrino Measurements
By BOREXINO Collaboration (A. Pocar et al.).
arXiv:1812.02326 [nucl-ex].

29) Recent Borexino results and perspectives of the SOX measurement
By Borexino/SOX Collaboration (A. Porcelli et al.).
[10.1051/epjconf/201818202099](https://doi.org/10.1051/epjconf/201818202099).
EPJ Web Conf. 182 (2018) 02099.

30) Double-beta decay of ^{130}Te to the first 0^+_{exc} excited state of ^{130}Xe with CUORE-0
By CUORE Collaboration (C. Alduino et al.).
arXiv:1811.10363 [nucl-ex].
[10.1140/epjc/s10052-019-7275-5](https://doi.org/10.1140/epjc/s10052-019-7275-5).
Eur.Phys.J. C79 (2019) no.9, 795.

31) Solar Neutrinos Spectroscopy with Borexino Phase-II
By Lino Miramonti et al..
[10.3390/universe4110118](https://doi.org/10.3390/universe4110118).
Universe 4 (2018) no.11, 118.

32) Solar Neutrino Physics with Borexino
By BOREXINO Collaboration (Andrea Pocar et al.).
arXiv:1810.12967 [nucl-ex].
[10.21468/SciPostPhysProc.1.025](https://doi.org/10.21468/SciPostPhysProc.1.025).
SciPost Phys.Proc. 1 (2019) 025.

33) Comprehensive measurement of $p-p$ -chain solar neutrinos
By BOREXINO Collaboration (M. Agostini et al.).
[10.1038/s41586-018-0624-y](https://doi.org/10.1038/s41586-018-0624-y).
Nature 562 (2018) no.7728, 505-510.

34) A calorimeter for the precise determination of the activity of the ^{144}Ce - ^{144}Pr anti-neutrino source in the SOX experiment
By K. Altenmüller et al..
[10.1088/1748-0221/13/09/P09008](https://doi.org/10.1088/1748-0221/13/09/P09008).
JINST 13 (2018) no.09, P09008.

35) Update on the recent progress of the CUORE experiment
By CUORE Collaboration (D.Q. Adams et al.).
arXiv:1808.10342 [nucl-ex].

36) The CUORE Bolometric Detector for Neutrinoless Double Beta Decay Searches
By L. Cassina et al..
[10.1007/978-981-13-1316-5_38](https://doi.org/10.1007/978-981-13-1316-5_38).
Springer Proc.Phys. 213 (2018) 202-207.

37) Modulations of the Cosmic Muon Signal in Ten Years of Borexino Data
By Borexino Collaboration (M. Agostini et al.).
arXiv:1808.04207 [hep-ex].
[10.1088/1475-7516/2019/02/046](https://doi.org/10.1088/1475-7516/2019/02/046).
JCAP 1902 (2019) 046.

38) A data acquisition and control system for large mass bolometer arrays
By S. Di Domizio et al..
arXiv:1807.11446 [physics.ins-det].

10.1088/1748-0221/13/12/P12003.
JINST 13 (2018) no.12, P12003.

39) The DUNE Far Detector Interim Design Report, Volume 3: Dual-Phase Module
By DUNE Collaboration (B. Abi et al.).
arXiv:1807.10340 [physics.ins-det].

40) The DUNE Far Detector Interim Design Report, Volume 2: Single-Phase Module
By DUNE Collaboration (B. Abi et al.).
arXiv:1807.10327 [physics.ins-det].

41) The DUNE Far Detector Interim Design Report Volume 1: Physics, Technology and Strategies
By DUNE Collaboration (B. Abi et al.).
arXiv:1807.10334 [physics.ins-det].

42) The CUORE and CUORE-0 experiments at LNGS
By C. Alduino et al..
10.1088/1742-6596/1056/1/012009.
J.Phys.Conf.Ser. 1056 (2018) no.1, 012009.

43) CUORE: first results and prospects
By Valentina Novati et al..
10.22323/1.295.0164.
PoS NuFact2017 (2017) 164.

44) The CUORE cryostat
By CUORE Collaboration (A. D'Addabbo et al.).
arXiv:1805.06209 [physics.ins-det].
10.1007/s10909-018-2054-5.
J.Low.Temp.Phys. 193 (2018) no.5-6, 867-875.

45) The commissioning of the CUORE experiment: the mini-tower run
By CUORE Collaboration (Simone Copello et al.).
10.22323/1.307.0072.
PoS NEUTEL2017 (2018) 072.

46) The SOX experiment hunts the sterile neutrino
By Lea Di Noto et al..
10.22323/1.307.0043.
PoS NEUTEL2017 (2018) 043.

47) Search for geo-neutrinos and rare nuclear processes with Borexino
By Alessio Caminata, Stefano Davini, Lea Di Noto, Marco Pallavicini, Gemma Testera, Sandra Zavatarelli.
10.1142/S0217751X18430091.
Int.J.Mod.Phys. A33 (2018) no.09, 1843009.

48) Constraints on Sub-GeV Dark-Matter–Electron Scattering from the DarkSide-50 Experiment
By DarkSide Collaboration (P. Agnes et al.).
arXiv:1802.06998 [astro-ph.CO].
10.1103/PhysRevLett.121.111303.
Phys.Rev.Lett. 121 (2018) no.11, 111303.

49) Low-Mass Dark Matter Search with the DarkSide-50 Experiment
By DarkSide Collaboration (P. Agnes et al.).
arXiv:1802.06994 [astro-ph.HE].
10.1103/PhysRevLett.121.081307.
Phys.Rev.Lett. 121 (2018) no.8, 081307.

50) DarkSide-50 532-day Dark Matter Search with Low-Radioactivity Argon

By DarkSide Collaboration (P. Agnes et al.).
arXiv:1802.07198 [astro-ph.CO].
[10.1103/PhysRevD.98.102006](https://arxiv.org/abs/10.1103/PhysRevD.98.102006).
Phys.Rev. D98 (2018) no.10, 102006.

51) Short distance neutrino Oscillations with Borexino: SOX
By B. Caccianiga et al..
[10.1393/ncc/i2017-17162-x](https://arxiv.org/abs/10.1393/ncc/i2017-17162-x).
Nuovo Cim. C40 (2017) no.5, 162.

52) Electroluminescence pulse shape and electron diffusion in liquid argon measured in a dual-phase TPC
By DarkSide Collaboration (P. Agnes et al.).
arXiv:1802.01427 [physics.ins-det].
[10.1016/j.nima.2018.06.077](https://arxiv.org/abs/10.1016/j.nima.2018.06.077).
Nucl.Instrum.Meth. A904 (2018) 23-34.

53) Study of Rare Nuclear Processes with CUORE
By CUORE Collaboration (C. Alduino et al.).
arXiv:1801.05403 [nucl-ex].
[10.1142/S0217751X18430029](https://arxiv.org/abs/10.1142/S0217751X18430029).
Int.J.Mod.Phys. A33 (2018) no.09, 1843002.

54) CeSOX: An experimental test of the sterile neutrino hypothesis with Borexino
By M. Gromov et al..
[10.1088/1742-6596/934/1/012003](https://arxiv.org/abs/10.1088/1742-6596/934/1/012003).
J.Phys.Conf.Ser. 934 (2017) no.1, 012003.

55) Borexino: Recent results and future plans
By BOREXINO Collaboration (O.Yu. Smirnov et al.).
[10.1134/S1063779617060533](https://arxiv.org/abs/10.1134/S1063779617060533).
Phys.Part.Nucl. 48 (2017) no.6, 1026-1029.

56) Results from CUORE and CUORE-0
By N. Moggi et al..
[10.1063/1.5007641](https://arxiv.org/abs/10.1063/1.5007641).
AIP Conf.Proc. 1894 (2017) no.1, 020016.

57) First Results from CUORE: A Search for Lepton Number Violation via $0\nu\beta\beta$ Decay of ^{130}Te
By CUORE Collaboration (C. Alduino et al.).
arXiv:1710.07988 [nucl-ex].
[10.1103/PhysRevLett.120.132501](https://arxiv.org/abs/10.1103/PhysRevLett.120.132501).
Phys.Rev.Lett. 120 (2018) no.13, 132501.

58) Search for Neutrinoless $\beta^+\beta$ Decay of ^{120}Te with CUORE-0
By CUORE Collaboration (C. Alduino et al.).
arXiv:1710.07459 [nucl-ex].
[10.1103/PhysRevC.97.055502](https://arxiv.org/abs/10.1103/PhysRevC.97.055502).
Phys.Rev. C97 (2018) no.5, 055502.

59) Lowering the CUORE energy threshold
By S. Copello et al..
[10.1088/1742-6596/888/1/012047](https://arxiv.org/abs/10.1088/1742-6596/888/1/012047).
J.Phys.Conf.Ser. 888 (2017) no.1, 012047.

60) Status and prospects for CUORE
By L. Canonica et al..
[10.1088/1742-6596/888/1/012034](https://arxiv.org/abs/10.1088/1742-6596/888/1/012034).
J.Phys.Conf.Ser. 888 (2017) no.1, 012034.

- 61) Test of the electron stability with the Borexino detector
By BOREXINO Collaboration (A. Vishneva et al.).
[10.1088/1742-6596/888/1/012193](https://doi.org/10.1088/1742-6596/888/1/012193).
J.Phys.Conf.Ser. 888 (2017) no.1, 012193.
- 62) The CUORE cryostat: a 10 mK infrastructure for large bolometric arrays
By Stefano Dell'Oro et al..
[10.1088/1742-6596/888/1/012235](https://doi.org/10.1088/1742-6596/888/1/012235).
J.Phys.Conf.Ser. 888 (2017) no.1, 012235.
- 63) Improvements in the simulation code of the SOX experiment
By A. Caminata et al..
[10.1088/1742-6596/888/1/012145](https://doi.org/10.1088/1742-6596/888/1/012145).
J.Phys.Conf.Ser. 888 (2017) no.1, 012145.
- 64) Solar neutrino detectors as sterile neutrino hunters
By Borexino-SOX Collaboration (Marco Pallavicini et al.).
[10.1088/1742-6596/888/1/012018](https://doi.org/10.1088/1742-6596/888/1/012018).
J.Phys.Conf.Ser. 888 (2017) no.1, 012018.
- 65) Improved measurement of 8B solar neutrinos with 1.5 kt y of Borexino exposure
By Borexino Collaboration (M. Agostini et al.).
arXiv:1709.00756 [hep-ex].
- 66) Low Energy Analysis Techniques for CUORE
By C. Alduino et al..
arXiv:1708.07809 [physics.ins-det].
[10.1140/epjc/s10052-017-5433-1](https://doi.org/10.1140/epjc/s10052-017-5433-1).
Eur.Phys.J. C77 (2017) no.12, 857.
- 67) Limiting neutrino magnetic moments with Borexino Phase-II solar neutrino data
By Borexino Collaboration (M. Agostini et al.).
arXiv:1707.09355 [hep-ex].
[10.1103/PhysRevD.96.091103](https://doi.org/10.1103/PhysRevD.96.091103).
Phys.Rev. D96 (2017) no.9, 091103.
- 68) First Simultaneous Precision Spectroscopy of ${}^7\text{Be}$, ${}^8\text{B}$, and ${}^9\text{Be}$ Solar Neutrinos with Borexino Phase-II
By Borexino Collaboration (M. Agostini et al.).
arXiv:1707.09279 [hep-ex].
[10.1103/PhysRevD.100.082004](https://doi.org/10.1103/PhysRevD.100.082004).
Phys.Rev. D100 (2019) no.8, 082004.
- 69) DarkSide-20k: A 20 tonne two-phase LAr TPC for direct dark matter detection at LNGS
By C.E. Aalseth et al..
arXiv:1707.08145 [physics.ins-det].
[10.1140/epjp/i2018-11973-4](https://doi.org/10.1140/epjp/i2018-11973-4).
Eur.Phys.J.Plus 133 (2018) 131.
- 70) A Search for Low-energy Neutrinos Correlated with Gravitational Wave Events GW 150914, GW 151226, and GW 170104 with the Borexino Detector
By BOREXINO Collaboration (M. Agostini et al.).
arXiv:1706.10176 [astro-ph.HE].
[10.3847/1538-4357/aa9521](https://doi.org/10.3847/1538-4357/aa9521).
Astrophys.J. 850 (2017) no.1, 21.
- 71) Results From Borexino at Lngs
By BOREXINO Collaboration (Stefano Davini et al.).
[10.1142/9789813224568_0012](https://doi.org/10.1142/9789813224568_0012).

72) CUORE and CUORE-0 experiments

By S. Copello et al..

[10.1393/ncc/i2017-17060-3](https://arxiv.org/abs/10.1393/ncc/i2017-17060-3).

Nuovo Cim. C40 (2017) no.1, 60.

73) Real-time detection of solar neutrinos with Borexino

By BOREXINO Collaboration (S. Marcocci et al.).

[10.1393/ncc/i2017-17058-9](https://arxiv.org/abs/10.1393/ncc/i2017-17058-9).

Nuovo Cim. C40 (2017) no.1, 58.

74) CUORE sensitivity to $\nu\bar{\nu}$ $\beta\beta$ decay

By CUORE Collaboration (C. Alduino et al.).

arXiv:1705.10816 [physics.ins-det].

[10.1140/epjc/s10052-017-5098-9](https://arxiv.org/abs/10.1140/epjc/s10052-017-5098-9).

Eur.Phys.J. C77 (2017) no.8, 532.

75) Cryogenic Characterization of FBK RGB-HD SiPMs

By DarkSide Collaboration (C.E. Aalseth et al.).

arXiv:1705.07028 [physics.ins-det].

[10.1088/1748-0221/12/09/P09030](https://arxiv.org/abs/10.1088/1748-0221/12/09/P09030).

JINST 12 (2017) no.09, P09030.

76) The Cryogenic Underground Observatory for Rare Events: Status and Prospects

By Eric Norman et al..

[10.22323/1.281.0369](https://arxiv.org/abs/10.22323/1.281.0369).

PoS INPC2016 (2017) 369.

77) The projected background for the CUORE experiment

By CUORE Collaboration (C. Alduino et al.).

arXiv:1704.08970 [physics.ins-det].

[10.1140/epjc/s10052-017-5080-6](https://arxiv.org/abs/10.1140/epjc/s10052-017-5080-6).

Eur.Phys.J. C77 (2017) no.8, 543.

78) Neutrinoless double beta decay results from CUORE-0 and status for CUORE experiment

By P. Gorla et al..

79) Recent Results From BOREXINO

By BOREXINO Collaboration (S. Zavatarelli et al.).

80) The Monte Carlo simulation of the Borexino detector

By Borexino Collaboration (M. Agostini et al.).

arXiv:1704.02291 [physics.ins-det].

[10.1016/j.astropartphys.2017.10.003](https://arxiv.org/abs/10.1016/j.astropartphys.2017.10.003).

Astropart.Phys. 97 (2018) 136-159.

81) Recent Results from Borexino

By Borexino Collaboration (D. Jeschke et al.).

[10.1088/1742-6596/798/1/012114](https://arxiv.org/abs/10.1088/1742-6596/798/1/012114).

J.Phys.Conf.Ser. 798 (2017) no.1, 012114.

82) The search for sterile neutrinos with SOX-Borexino

By K. Altenmüller et al..

[10.1134/S106377881610001X](https://arxiv.org/abs/10.1134/S106377881610001X).

Phys.Atom.Nucl. 79 (2016) no.11-12, 1481-1484.

83) Status of CUORE Experiment and latest results from CUORE-0

By CUORE Collaboration (C. Pagliarone et al.).

[10.1393/ncc/i2016-16375-9](https://arxiv.org/abs/10.1393/ncc/i2016-16375-9).

Nuovo Cim. C39 (2017) no.4, 375.

- 84) The CUORE cryostat and its bolometric detector
By CUORE Collaboration (D. Santone et al.).
[10.1088/1748-0221/12/02/C02055](https://arxiv.org/abs/10.1088/1748-0221/12/02/C02055).
JINST 12 (2017) no.02, C02055.
- 85) Seasonal Modulation of the ^7Be Solar Neutrino Rate in Borexino
By BOREXINO Collaboration (M. Agostini et al.).
arXiv:1701.07970 [hep-ex].
[10.1016/j.astropartphys.2017.04.004](https://arxiv.org/abs/10.1016/j.astropartphys.2017.04.004).
Astropart.Phys. 92 (2017) 21-29.
- 86) The CUORE and CUORE-0 experiments at LNGS
By A. D'Addabbo et al..
arXiv:1612.04276 [physics.ins-det].
[10.1051/epjconf/201716407047](https://arxiv.org/abs/10.1051/epjconf/201716407047).
EPJ Web Conf. 164 (2017) 07047.
- 87) The SOX experiment: understanding the detector behavior using calibration sources
By A. Caminata et al..
[10.3204/DESY-PROC-2016-05/22](https://arxiv.org/abs/10.3204/DESY-PROC-2016-05/22).
- 88) Monte Carlo simulations in neutrino physics: the example of the SOX experiment
By A. Caminata et al..
[10.3204/DESY-PROC-2016-05/21](https://arxiv.org/abs/10.3204/DESY-PROC-2016-05/21).
- 89) Measurement of solar neutrino fluxes with Borexino
By S. Marcocci et al..
[10.3204/DESY-PROC-2016-05/30](https://arxiv.org/abs/10.3204/DESY-PROC-2016-05/30).
- 90) Search for sterile neutrinos with the SOX experiment
By A. Caminata et al..
[10.1393/ncc/i2016-16236-7](https://arxiv.org/abs/10.1393/ncc/i2016-16236-7).
Nuovo Cim. C39 (2016) no.1, 236.
- 91) Measurement of the two-neutrino double-beta decay half-life of ^{130}Te with the CUORE-0 experiment
By CUORE Collaboration (C. Alduino et al.).
arXiv:1609.01666 [nucl-ex].
[10.1140/epj/s10052-016-4498-6](https://arxiv.org/abs/10.1140/epj/s10052-016-4498-6).
Eur.Phys.J. C77 (2017) no.1, 13.
- 92) Borexino's search for low-energy neutrino and antineutrino signals correlated with gamma-ray bursts
By BOREXINO Collaboration (M. Agostini et al.).
arXiv:1607.05649 [astro-ph.HE].
[10.1016/j.astropartphys.2016.10.004](https://arxiv.org/abs/10.1016/j.astropartphys.2016.10.004).
Astropart.Phys. 86 (2017) 11-17.
- 93) Short distance neutrino oscillations with Borexino
By A. Caminata et al..
[10.1051/epjconf/201612101002](https://arxiv.org/abs/10.1051/epjconf/201612101002).
EPJ Web Conf. 121 (2016) 01002.
- 94) First real-time detection of solar pp neutrinos by Borexino
By M. Pallavicini et al..
[10.1051/epjconf/201612101001](https://arxiv.org/abs/10.1051/epjconf/201612101001).
EPJ Web Conf. 121 (2016) 01001.
- 95) SOX: search for short baseline neutrino oscillations with Borexino

By Borexino Collaboration (M. Vivier et al.).
[10.1088/1742-6596/718/6/062066](https://doi.org/10.1088/1742-6596/718/6/062066).
J.Phys.Conf.Ser. 718 (2016) no.6, 062066.

96) Recent results from Borexino
By G. Testera et al..
[10.1088/1742-6596/718/6/062059](https://doi.org/10.1088/1742-6596/718/6/062059).
J.Phys.Conf.Ser. 718 (2016) no.6, 062059.

97) The CUORE cryostat: commissioning and performance
By V. Singh et al..
[10.1088/1742-6596/718/6/062054](https://doi.org/10.1088/1742-6596/718/6/062054).
J.Phys.Conf.Ser. 718 (2016) no.6, 062054.

98) High significance measurement of the terrestrial neutrino flux with the Borexino detector
By A. Ianni et al..
[10.1088/1742-6596/718/6/062025](https://doi.org/10.1088/1742-6596/718/6/062025).
J.Phys.Conf.Ser. 718 (2016) no.6, 062025.

99) Results from the CUORE-0 experiment
By L. Canonica et al..
[10.1088/1742-6596/718/6/062007](https://doi.org/10.1088/1742-6596/718/6/062007).
J.Phys.Conf.Ser. 718 (2016) no.6, 062007.

100) SOX: Short Distance Neutrino Oscillations with Borexino
By SOX Collaboration (D. Bravo-Berguño et al.).
[10.1016/j.nuclphysbps.2015.09.283](https://doi.org/10.1016/j.nuclphysbps.2015.09.283).
Nucl.Part.Phys.Proc. 273-275 (2016) 1760-1764.

101) Recent results from Borexino and the first real time measure of solar pp neutrinos
By S. Zavatarelli et al..
[10.1016/j.nuclphysbps.2015.09.282](https://doi.org/10.1016/j.nuclphysbps.2015.09.282).
Nucl.Part.Phys.Proc. 273-275 (2016) 1753-1759.

102) The Main Results of the Borexino Experiment
By A. Derbin et al..
arXiv:1605.06795 [hep-ex].

103) A high precision calorimeter for the SOX experiment
By L. Papp et al..
[10.1016/j.nima.2015.11.046](https://doi.org/10.1016/j.nima.2015.11.046).
Nucl.Instrum.Meth. A824 (2016) 699-700.

104) CUORE-0 detector: design, construction and operation
By CUORE Collaboration (C. Alduino et al.).
arXiv:1604.05465 [physics.ins-det].
[10.1088/1748-0221/11/07/P07009](https://doi.org/10.1088/1748-0221/11/07/P07009).
JINST 11 (2016) no.07, P07009.

105) The CUORE Cryostat: A 1-Ton Scale Setup for Bolometric Detectors
By CUORE Collaboration (C. Ligi et al.).
arXiv:1603.03306 [physics.ins-det].
[10.1007/s10909-015-1389-4](https://doi.org/10.1007/s10909-015-1389-4).
J.Low.Temp.Phys. 184 (2016) no.3-4, 590-596.

106) New results of the Borexino experiment: pp solar neutrino detection
By S. Davini et al..
[10.1393/ncc/i2015-15120-4](https://doi.org/10.1393/ncc/i2015-15120-4).
Nuovo Cim. C38 (2016) no.4, 120.

107) Recent results from BOREXINO

By B. Caccianiga et al..

108) CNO and pep solar neutrino measurements and perspectives in Borexino

By Borexino Collaboration (S. Davini et al.).

[10.1088/1742-6596/675/1/012040](https://doi.org/10.1088/1742-6596/675/1/012040).

J.Phys.Conf.Ser. 675 (2016) no.1, 012040.

109) Overview and accomplishments of the Borexino experiment

By Borexino Collaboration (G. Ranucci et al.).

[10.1088/1742-6596/675/1/012036](https://doi.org/10.1088/1742-6596/675/1/012036).

J.Phys.Conf.Ser. 675 (2016) no.1, 012036.

110) The high precision measurement of the ^{144}Ce activity in the SOX experiment

By SOX Collaboration (L. Di Noto et al.).

[10.1088/1742-6596/675/1/012035](https://doi.org/10.1088/1742-6596/675/1/012035).

J.Phys.Conf.Ser. 675 (2016) no.1, 012035.

111) The ^{144}Ce source for SOX

By Borexino Collaboration (M. Durero et al.).

[10.1088/1742-6596/675/1/012032](https://doi.org/10.1088/1742-6596/675/1/012032).

J.Phys.Conf.Ser. 675 (2016) no.1, 012032.

112) Geo-neutrino results with Borexino

By Borexino Collaboration (R. Roncin et al.).

[10.1088/1742-6596/675/1/012029](https://doi.org/10.1088/1742-6596/675/1/012029).

J.Phys.Conf.Ser. 675 (2016) no.1, 012029.

113) Measurement of Solar pp-neutrino flux with Borexino: results and implications

By Borexino Collaboration (O.Yu Smirnov et al.).

[10.1088/1742-6596/675/1/012027](https://doi.org/10.1088/1742-6596/675/1/012027).

J.Phys.Conf.Ser. 675 (2016) no.1, 012027.

114) Test of the electric charge conservation law with Borexino detector

By Borexino Collaboration (A. Vishneva et al.).

[10.1088/1742-6596/675/1/012025](https://doi.org/10.1088/1742-6596/675/1/012025).

J.Phys.Conf.Ser. 675 (2016) no.1, 012025.

115) Understanding the detector behavior through Montecarlo and calibration studies in view of the SOX measurement

By A. Caminata et al..

[10.1088/1742-6596/675/1/012012](https://doi.org/10.1088/1742-6596/675/1/012012).

J.Phys.Conf.Ser. 675 (2016) no.1, 012012.

116) Analysis techniques for the evaluation of the neutrinoless double- β decay lifetime in ^{130}Te with the CUORE-0 detector

By CUORE Collaboration (C. Alduino et al.).

arXiv:1601.01334 [nucl-ex].

[10.1103/PhysRevC.93.045503](https://doi.org/10.1103/PhysRevC.93.045503).

Phys.Rev. C93 (2016) no.4, 045503.

117) First neutrinoless double beta decay results from CUORE-0

By L. Gironi et al..

[10.1063/1.4934900](https://doi.org/10.1063/1.4934900).

AIP Conf.Proc. 1686 (2015) no.1, 020011.

118) Results of CUORE-0 and prospects for the CUORE experiment

By L. Canonica et al..

[10.1016/j.nuclphysbps.2015.06.020](https://doi.org/10.1016/j.nuclphysbps.2015.06.020).

Nucl.Part.Phys.Proc. 265-266 (2015) 73-76.

119) A test of electric charge conservation with Borexino

By Borexino Collaboration (M. Agostini et al.).

arXiv:1509.01223 [hep-ex].

[10.1103/PhysRevLett.115.231802](https://arxiv.org/abs/10.1103/PhysRevLett.115.231802).

Phys.Rev.Lett. 115 (2015) 231802.

120) Low-energy (anti)neutrino physics with Borexino: Neutrinos from the primary proton-proton fusion process in the Sun

By P. Mosteiro et al..

arXiv:1508.05379 [hep-ex].

[10.1016/j.nuclphysbps.2015.06.023](https://arxiv.org/abs/10.1016/j.nuclphysbps.2015.06.023).

Nucl.Part.Phys.Proc. 265-266 (2015) 87-92.

121) R&D project for neutrinoless double beta decay in Borexino

By Borexino Collaboration (S. Marcocci et al.).

[10.1393/ncc/i2015-15051-0](https://arxiv.org/abs/10.1393/ncc/i2015-15051-0).

Nuovo Cim. C38 (2015) no.1, 51.

122) The SOX experiment in the neutrino physics

By L. Di Noto et al..

[10.1393/ncc/i2015-15036-y](https://arxiv.org/abs/10.1393/ncc/i2015-15036-y).

Nuovo Cim. C38 (2015) no.1, 36.

123) Neutrino measurements from the Sun and Earth: Results from Borexino

By G. Bellini et al..

[10.1063/1.4915567](https://arxiv.org/abs/10.1063/1.4915567).

AIP Conf.Proc. 1666 (2015) no.1, 090002.

124) Measurement of neutrino flux from the primary proton–proton fusion process in the Sun with Borexino detector

By Borexino Collaboration (O.Yu. Smirnov et al.).

arXiv:1507.02432 [hep-ex].

[10.1134/S106377961606023X](https://arxiv.org/abs/10.1134/S106377961606023X).

Phys.Part.Nucl. 47 (2016) no.6, 995-1002.

125) Spectroscopy of geoneutrinos from 2056 days of Borexino data

By Borexino Collaboration (M. Agostini et al.).

arXiv:1506.04610 [hep-ex].

[10.1103/PhysRevD.92.031101](https://arxiv.org/abs/10.1103/PhysRevD.92.031101).

Phys.Rev. D92 (2015) no.3, 031101.

126) Search for Neutrinoless Double-Beta Decay of ^{130}Te with CUORE-0

By CUORE Collaboration (K. Alfonso et al.).

arXiv:1504.02454 [nucl-ex].

[10.1103/PhysRevLett.115.102502](https://arxiv.org/abs/10.1103/PhysRevLett.115.102502).

Phys.Rev.Lett. 115 (2015) no.10, 102502.

127) Short Distance Neutrino Oscillations with BoreXino: SOX

By O. Smirnov et al..

[10.1016/j.phpro.2014.12.115](https://arxiv.org/abs/10.1016/j.phpro.2014.12.115).

Phys.Procedia 61 (2015) 511-517.

128) Neutrinoless double-beta decay search with CUORE and CUORE-0 experiments

By N. Moggi et al..

[10.1051/epjconf/20159003004](https://arxiv.org/abs/10.1051/epjconf/20159003004).

EPJ Web Conf. 90 (2015) 03004.

129) Geo-neutrinos and Borexino

By L. Ludhova et al..

[10.1134/S1063779615020148](https://doi.org/10.1134/S1063779615020148).
Phys.Part.Nucl. 46 (2015) no.2, 174-181.

130) Status of the CUORE and results from the CUORE-0 neutrinoless double beta decay experiments

By CUORE Collaboration (M. Sisti et al.).
arXiv:1502.03653 [physics.ins-det].
[10.1016/j.nuclphysbps.2015.09.277](https://doi.org/10.1016/j.nuclphysbps.2015.09.277).
Nucl.Part.Phys.Proc. 273-275 (2016) 1719-1725.

131) CUORE-0 results and prospects for the CUORE experiment

By CUORE Collaboration (D.R. Artusa et al.).
arXiv:1502.02576 [physics.ins-det].
[10.1063/1.4915591](https://doi.org/10.1063/1.4915591).
AIP Conf.Proc. 1666 (2015) no.1, 170001.

132) The CUORE and CUORE-0 Experiments at Gran Sasso

By A. Giachero et al..
arXiv:1410.7481 [physics.ins-det].
[10.1051/epiconf/20159504024](https://doi.org/10.1051/epiconf/20159504024).
EPJ Web Conf. 95 (2015) 04024.

133) Solar neutrino with Borexino: results and perspectives

By Borexino Collaboration (O. Smirnov et al.).
arXiv:1410.0779 [physics.ins-det].
[10.1134/S1063779615020185](https://doi.org/10.1134/S1063779615020185).
Phys.Part.Nucl. 46 (2015) no.2, 166-173.

134) Neutrinos from the primary proton–proton fusion process in the Sun

By BOREXINO Collaboration (G. Bellini et al.).
[10.1038/nature13702](https://doi.org/10.1038/nature13702).
Nature 512 (2014) no.7515, 383-386.

135) SOX: Short distance neutrino Oscillations with BoreXino

By Borexino Collaboration (G. Bellini et al.).
arXiv:1304.7721 [physics.ins-det].
[10.1007/JHEP08\(2013\)038](https://doi.org/10.1007/JHEP08(2013)038).
JHEP 1308 (2013) 038.