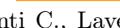
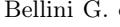
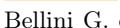
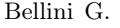


References

- [1] Pontekorvo B. M., *ZhETF*, **33** (1957), 549; Pontecorvo B., *Sov. Phys. JETP*, **6** (1958), 429 [ads*](#)
- [2] Pontecorvo B., *Sov. Phys. JETP*, **7** (1958), 172
- [3] Maki Z., Nakagawa M., Sakata S., *Prog. Theor. Phys.*, **28** (1962), 870 [crossref](#) [ads*](#)
- [4] Cleveland B. T. et al., *Astrophys. J.*, **496** (1998), 505 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [5] Hirata K. S. et al., *Phys. Rev. Lett.*, **63** (1989), 16 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [6] Abdurashitov J. N. et al. (SAGE Collab.), *Phys. Rev. C*, **80** (2009), 015807 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [7] Kaether F. et al., *Phys. Lett. B*, **685** (2010), 47 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [8] Hosaka J. et al. (Super-Kamiokande Collab.), *Phys. Rev. D*, **73** (2006), 112001 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [9] Abe K. et al. (Super-Kamiokande Collab.), *Phys. Rev. D*, **83** (2011), 052010 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [10] Aharmim B. et al. (SNO Collab.), *Phys. Rev. C*, **72** (2005), 055502 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [11] Aharmim B. et al. (SNO Collab.), *Phys. Rev. Lett.*, **101** (2008), 111301 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [12] Gribov V., Pontecorvo B., *Phys. Lett. B*, **28** (1969), 493 [crossref](#) [ads*](#)
- [13] Bilen'kii S. M., Pontecorvo B., *Sov. Phys. Usp.*, **20** (1977), 776 [crossref](#) [crossref](#) [ads*](#)
- [14] Wolfenstein L., *Phys. Rev. D*, **17** (1978), 2369 [crossref](#) [ads*](#)
- [15] Wolfenstein L., *Phys. Rev. D*, **20** (1979), 2634 [crossref](#) [ads*](#)
- [16] Mikheev S. P., Smirnov A. Yu., *Sov. J. Nucl. Phys.*, **42** (1985), 913 [ads*](#)
- [17] Mikheyev S. P., Smirnov A. Yu., *Nuovo Cimento C*, **9** (1986), 17 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [18] Mikheev S. P., Smirnov A. Yu., *Sov. Phys. JETP*, **64** (1986), 4 [ads*](#)
- [19] Abe S. et al. (The KamLAND Collab.), *Phys. Rev. Lett.*, **100** (2008), 221803 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [20] Bellini G. et al. (Borexino Collab.), *Phys. Rev. Lett.*, **107** (2011), 141302 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [21] Bellini G. et al. (Borexino Collab.), *Phys. Rev. Lett.*, **108** (2012), 051302 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [22] Bethe H. A., *Phys. Rev.*, **55** (1939), 434 [crossref](#) [ads*](#)
- [23] Haxton W. C., Serenelli A. M., *Astrophys. J.*, **687** (2008), 678 [crossref](#) [\[WEB OF SCIENCE™\]](#); arXiv: [0805.2013](#)
- [24] Serenelli A. M., Haxton W. C., Peña-Garay C., *Astrophys. J.*, **743** (2011), 24 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#); arXiv: [1104.1639](#)
- [25] Stonehill L. C., Formaggio J. A., Robertson R. G. H., *Phys. Rev. C*, **69** (2004), 015801 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [26] Grevesse N., Sauval A. J., *Space Sci. Rev.*, **85** (1998), 161 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [27] Serenelli A. M., Basu S., Ferguson J. W., Asplund M., *Astrophys. J.*, **705** (2009), L123 [crossref](#) [ads*](#) [\[WEB OF SCIENCE™\]](#)
- [28] Bethe H., Peierls R., *Nature*, **133** (1934), 532 [crossref](#)
- [29] Pontecorvo B., 1946, Chalk River Laboratory Report PD-205
- [30] Lee T. D., Yang C. N., *Phys. Rev.*, **104** (1956), 254 [crossref](#)

- [31] Wu C. S. et al., *Phys. Rev.*, **105** (1957), 1413  
- [32] Bahcall J. N., Davis R. (Jr.), *CERN Courier*, **40**:6 (2000), 17; *Publ. Astron. Soc. Pacific*, **112** (2000), 429   ; arXiv:[astro-ph/9911486](https://arxiv.org/abs/astro-ph/9911486)
- [33] Kuzmin V. A., *ZhETF*, **49** (1965), 1532; Kuz'min V. A., *Sov. Phys. JETP*, **22** (1966), 1051 
- [34] Anselmann P. et al. (GALLEX Collab.), *Phys. Lett. B*, **285** (1992), 376   
- [35] Hampel W. et al. (GALLEX Collab.), *Phys. Lett. B*, **447** (1999), 127   
- [36] Altmann M. et al. (GNO Collab.), *Phys. Lett. B*, **616** (2005), 174   
- [37] Abdurashitov J. N. et al. (SAGE Collab.), *Phys. Lett. B*, **328** (1994), 234   
- [38] Giunti C., Laveder M., *Phys. Rev. C*, **83** (2011), 065504   ; arXiv:[1006.3244](https://arxiv.org/abs/1006.3244)
- [39] Abazajian K. N. et al., arXiv:[1204.5379](https://arxiv.org/abs/1204.5379)
- [40] Gavrin V. N. et al., arXiv:[1006.2103](https://arxiv.org/abs/1006.2103)
- [41] Fukuda Y. et al. (Super-Kamiokande Collab.), *Phys. Rev. Lett.*, **81** (1998), 1562   
- [42] Ahmad Q. R. et al. (SNO Collab.), *Phys. Rev. Lett.*, **87** (2001), 071301   
- [43] Ahmad Q. R. et al. (SNO Collab.), *Phys. Rev. Lett.*, **89** (2002), 011301   
- [44] Aharmim B. et al. (SNO Collab.), *Phys. Rev. C*, **88** (2013), 025501   
- [45] Lozza V. (for SNO+ Collab.), arXiv:[1201.6599](https://arxiv.org/abs/1201.6599)
- [46] Eguchi K. et al. (KamLAND Collab.), *Phys. Rev. Lett.*, **90** (2003), 021802   
- [47] Abe S. et al. (KamLAND Collab.), arXiv:[1106.0861](https://arxiv.org/abs/1106.0861)
- [48] Gando A. et al. (KamLAND-Zen Collab.), *Phys. Rev. Lett.*, **110** (2013), 062502   
- [49] Gando A. et al., arXiv:[1309.6805](https://arxiv.org/abs/1309.6805)
- [50] Arpesella C. et al. (Borexino Collab.), *Phys. Lett. B*, **658** (2008), 101   
- [51] Arpesella C. et al. (Borexino Collab.), *Phys. Rev. Lett.*, **101** (2008), 091302   
- [52] Derbin A. V., *Phys. Atom. Nucl.*, **73** (2010), 1935   
- [53] *Borexino Experiment*, <http://borex.lngs.infn.it>
- [54] Beringer J. et al. (Particle Data Group), *Phys. Rev. D*, **86** (2012), 010001   
- [55] Nakamura K. (Particle Data Group), *J. Phys G Nucl. Part. Phys.*, **37** (2010), 075021   
- [56] Gonzalez-Garcia M. C., Maltoni M., Salvado J., *JHEP*, 2010, no. 05, 072   
- [57] Bellini G. et al. (Borexino Collab.), *Phys. Rev. D*, **82** (2010), 033006   
- [58] Bellini G. et al. (Borexino Collab.), *Phys. Rev. C*, **81** (2010), 034317   
- [59] Bellini G. et al. (Borexino Collab.), *Phys. Lett. B*, **696** (2011), 191   

- [60] Bellini G. et al. (Borexino Collab.), *Phys. Rev. D*, **85** (2012), 092003  *

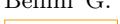
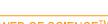
- [61] Bellini G. et al. (Borexino Collab.), *Phys. Rev. D*, **88** (2013), 072010  *

- [62] Beacom J. F., Vogel P., *Phys. Rev. Lett.*, **83** (1999), 5222  * 
- [63] Joshipura A. S., Mohanty S., *Phys. Rev. D*, **66** (2002), 012003  *

- [64] Grimus W. et al., *Nucl. Phys. B*, **648** (2003), 376   
- [65] Montanino D., Picariello M., Pulido J., *Phys. Rev. D*, **77** (2008), 093011  *

- [66] *Phys. Part. Nucl. Lett.*, **10** (2013), 139 
- [67] Auerbach L. B. et al. (LSND Collab.), *Phys. Rev. D*, **63** (2001), 112001  *

- [68] Schwienhorst R. et al. (DONUT Collab.), *Phys. Lett. B*, **513** (2001), 23  *

- [69] Bellini G. et al. (Borexino Collab.), *JHEP*, 2013, no. 08, 038   
arXiv: [1304.7721](https://arxiv.org/abs/1304.7721)
- [70] Bellini G. et al. (Borexino Collab.), *Phys. Lett. B*, **707** (2012), 22  *

- [71] Wurm M. et al., *Astropart. Phys.*, **35** (2012), 685  * 
- [72] McKinsey D. N., Coakley K. J., *Astropart. Phys.*, **22** (2005), 355  *

- [73] Abe K. et al. (XMASS Collab.), arXiv: [1301.2815](https://arxiv.org/abs/1301.2815)