

TAsP
Recent Representative Publications

Journals

- Bari**
- F. Capozzi, E. Lisi, A. Marrone, D. Montanino and A. Palazzo,
"Neutrino masses and mixings: Status of known and unknown 3-neutrino parameters," Nucl. Phys. B **908**, 218 (2016)
 - G. Fanizza, M. Gasperini, G. Marozzi and G. Veneziano,
"A new approach to the propagation of light-like signals in perturbed cosmological backgrounds," JCAP **1508**, no. 08, 020 (2015)
 - A. Mirizzi et al.,
"Supernova Neutrinos: Production, Oscillations and Detection," Riv. Nuovo Cim. **39**, no. 1-2, 1 (2016)
- Ferrara**
- G. Iacobellis and I. Masina,
"Stationary configurations of the Standard Model Higgs potential: Electroweak stability and rising inflection point", Phys. Rev. D **94**, no.7, 073005 (2016)
 - F. An et al.,
"Neutrino physics with JUNO", J. Phys. G **43**, no.3, 030401 (2016)
 - M. Baldoncini, I. Callegari, G. Fiorentini, F. Mantovani, B. Ricci, V. Strati and G. Xhixha,
"Reference worldwide model for antineutrinos from reactors", Phys. Rev. D **91**, no. 6, 065002 (2015)
- Lecce**
- A.A. Nucita, F. De Paolis, G. Ingrosso, M. Giordano and L. Manni,
"Parallax and orbital effects in astrometric microlensing with binary sources", Astrophys. J. **823**, 120 (2016)
 - F. De Paolis, M. Giordano, G. Ingrosso, L. Manni, A. Nucita and F. Strafella,
"The Scales of Gravitational Lensing", Universe **2**, no. 1, 6 (2016)
 - M. Meyer, D. Montanino and J. Conrad,
"On detecting oscillations of gamma rays into axion-like particles in turbulent and coherent magnetic fields", JCAP **1409**, 003 (2014)
- LNF**
- C. S. Fong, D. Meloni, A. Meroni and E. Nardi,
"Leptogenesis in SO(10)" JHEP **1501**, 111 (2015)
 - G. Anamiati, M. Hirsch and E. Nardi,
"Quasi-Dirac neutrinos at the LHC", JHEP **1610**, 010 (2016)
 - L. Di Luzio, F. Mescia and E. Nardi,
"Redefining the Axion Window", Phys. Rev. Lett. **118**, no. 3, 031801 (2017)
- LNGS**
- A. Palladino, G. Pagliaroli, F. L. Villante and F. Vissani,
"What is the Flavor of the Cosmic Neutrinos Seen by IceCube?", Phys. Rev. Lett. **114**, no. 17, 171101 (2015)

- R. Aloisio, D. Boncioli, A. di Matteo, A.F. Grillo, S. Petrera and F. Salamida, "Cosmogenic neutrinos and ultra-high energy cosmic ray models", *JCAP* **1510**, no. 10, 006 (2015)
- N. Vinyoles, A.M. Serenelli, F.L. Villante et al., "A new Generation of Standard Solar Models", *Astrophys. J.* **835**, no. 2, 202 (2017)

Napoli

- S.M. Boucenna, M. Chianese, G. Mangano, G. Miele, S. Morisi, O. Pisanti and E. Vitagliano, "Decaying Leptophilic Dark Matter at IceCube", *JCAP* **1512**, 055 (2015)
- L. E. Marcucci, G. Mangano, A. Kievsky and M. Viviani, "Implication of the proton-deuteron radiative capture for Big Bang Nucleosynthesis", *Phys. Rev. Lett.* **116**, 102501 (2016)
- A. Mirizzi, G. Mangano, O. Pisanti and N. Saviano, "Collisional production of sterile neutrinos via secret interactions and cosmological implications", *Phys. Rev. D* **91**, 025019 (2015)

Padova

- W.J. Marciano, A. Masiero, P. Paradisi and M. Passera, "Contributions of axionlike particles to lepton dipole moments", *Phys. Rev. D* **94**, no. 11, 115033 (2016)
- F. Capozzi, C. Giunti, M. Laveder and A. Palazzo, "Joint short- and long-baseline constraints on light sterile neutrinos", *Phys. Rev. D* **95**, no. 3, 033006 (2017)
- F. Feruglio, P. Paradisi and A. Pattori, "Revisiting Lepton Flavor Universality in B Decays", *Phys. Rev. Lett.* **118**, no. 1, 011801 (2017)

Pavia

- M. Roncadelli and F. Tavecchio, "No axions from the Sun", *Mon. Not. R. Astron. Soc.* **450**, L26 (2015).
- P. Esposito et al., "EXTraS discovery of 1.2-s X-ray pulsar in M31", *Mon. Not. R. Astron. Soc. A* **457**, L5A (2016).
- F. Pintore et al., "The variable spin-down rate of the magnetar XTE J1810-197", *Mon. Not. R. Astron. Soc. A* **458**, 2088 (2016).

Pisa

- G. Valle, M. Dell'Omodarme, P.G. Prada Moroni and S. Degl'Innocenti, "Calibrating convective-core overshooting with eclipsing binary systems: The case of low-mass main-sequence stars", *Astronomy & Astrophysics* **587**, id. A16 (2016)
- M. Cignoni et al., "Hubble Tarantula Treasury Project V. The Star Cluster Hodge 301: The Old Face of 30 Doradus", *The Astrophysical Journal* **833**, Issue 2, article id. 154 (2016)

- E. Tognelli, P.G. Prada Moroni and S. Degl’Innocenti,
”Effect of planet ingestion on low-mass stars evolution: the case of 2MASS J08095427-4721419 star in the Gamma Velorum cluster”, *Mon. Not. R. Astron. Soc.* **460**, Issue 4, p.3888 (2016)

Roma I

- E. Di Valentino, A. Melchiorri and J. Silk,
”Reconciling Planck with the local value of H_0 in extended parameter space”, *Phys. Lett. B* **761**, 242 (2016)
- E. Di Valentino, E. Giusarma, O. Mena, Olga, A. Melchiorri and J. Silk,
”Cosmological limits on neutrino unknowns versus low redshift priors”, *Phys. Rev. D* **93** no.8, 083527 (2016)
- E. Di Valentino, E. Giusarma, M. Lattanzi, O. Mena, A. Melchiorri and J. Silk,
”Cosmological Axion and neutrino mass constraints from Planck 2015 temperature and polarization data”, *Phys. Lett. B* **752**, 182 (2016)

Torino

- H. Zechlin, A. Cuoco, F. Donato, N. Fornengo, M. Regis,
”Statistical Measurement of the Gamma-ray Source-count Distribution as a Function of Energy”, *Astrophys. J.* **826**, L31 (2016)
- M. Regis, J.Q. Xia, A. Cuoco, E. Branchini, N. Fornengo and M. Viel,
”Particle dark matter searches outside the Local Group”, *Phys. Rev. Lett.* **114**, 241301 (2015)
- S. Gariazzo, C. Giunti, M. Laveder, Y.F. Li, E.M. Zavanin,
”Light sterile neutrinos”, *J. Phys. G* **43**, 033001 (2016)

Trieste

- S.T. Petcov,
”Predicting the Values of the Leptonic CP Violation Phases in Theories with Discrete Symmetries”, *Nucl. Phys. B* **892**, 400 (2015)
- I. Girardi, S.T. Petcov, A.J. Stuart and A.V. Titov,
”Leptonic Dirac CP Violation Predictions from Residual Discrete Symmetries”, *Nucl. Phys. B* **902**, 1 (2016)
- P. Ullio and M. Valli,
”A critical reassessment of particle Dark Matter limits from dwarf satellites”, *JCAP* **1607**, 025 (2016)

Books (and contributions to Books) authored by TAsP members

- C. Giunti, C. W. Kim
"Fundamentals of Neutrino Physics and Astrophysics"
Oxford University Press, United Kingdom (2007)
- Julien Lesgourgues, Gianpiero Mangano, Gennaro Miele, Sergio Pastor
"Neutrino Cosmology"
Cambridge University Press, United Kingdom (2013)
- Salvatore Esposito
"The Physics of Ettore Majorana"
Cambridge University Press, United Kingdom (2015)
- Maurizio Gasperini
"Theory of Gravitational Interactions"
Springer International Publishing, Switzerland (2017)
- K. Nakamura and S. Petcov
"Neutrino Mass, Mixing and Oscillations"
Contribution to the Particle Data Book 2016, in The Review of Particle Physics, Chin. Phys. C 40, 100001 (2016).