Stefano Castro Tognini

Oak Ridge National Laboratory

→ +1 (865) 341 0453

→ togninis@ornl.gov

in stognini

Publications

Research profiles

- orcid.org/0000-0001-9741-6608
- inspirehep.net/authors/1074966
- P publons.com/researcher/1798369/stefano-castro-tognini/
- R⁶ www.researchgate.net/profile/S_Tognini

Journal articles

- 2021 M. A. Acero, et al. (NO ν A Collab.) Seasonal Variation of Multiple-Muon Cosmic Ray Air Showers Observed in the NOvA Detector on the Surface. Accepted in PRD [PLACEHOLDER]. https://arxiv.org/abs/2105.03848
- 2020 P. Adamson, et al. (MINOS+ Collab.) Precision Constraints for Three-Flavor Neutrino Oscillations from the Full MINOS+ and MINOS Dataset. Phys. Rev. Lett. 125, 131802. DOI: 10.1103/PhysRevLett.125.131802
 - P. Adamson, *et al.* (MINOS+ Collab.) **Improved Constraints on Sterile Neutrino Mixing from Disappearance Searches in the MINOS, MINOS+, Daya Bay, and Bugey-3 Experiments**. Phys. Rev. Lett. **125**, 071801. DOI: 10.1103/PhysRevLett.125.071801
- 2019 M. A. Acero, et al. (NOνA Collab.) Observation of seasonal variation of atmospheric multiple-muon events in the NOvA Near Detector. Phys. Rev. D 99, 122004. DOI: 10.1103/Phys-RevD.99.122004
 - P. Adamson, et al. (MINOS+ Collab.) Search for Sterile Neutrinos in MINOS and MINOS+ Using a Two-Detector Fit. Phys. Rev. Lett. 122, 091803. DOI: 10.1103/PhysRevLett.122.091803
- 2018 M. A. Acero, et al. (NO ν A Collab.) New constraints on oscillation parameters from $\nu_{\rm e}$ appearance and ν_{μ} disappearance in the NO ν A experiment. Phys. Rev. D 98, 032012. DOI: 10.1103/Phys-RevD.98.032012
- 2017 P. Adamson, et al. (NOνA Collab.) Search for active-sterile neutrino mixing using neutral-current interactions in NOνA. Phys. Rev. D 96, 072006. DOI: 10.1103/PhysRevD.96.072006
 - P. Adamson, et al. (MINOS+ Collab.) Search for flavor-changing nonstandard neutrino interactions using ν_e appearance in MINOS. Phys. Rev. D 95, 012005. DOI: 10.1103/PhysRevD.95.012005
 - P. Adamson, et al. (NO ν A Collab.) Measurement of the Neutrino Mixing Angle θ_{23} in NO ν A. Phys. Rev. Lett. 118, 151802. DOI: 10.1103/PhysRevLett.118.151802
 - P. Adamson, et al. (NO ν A Collab.) Constraints on Oscillation Parameters from ν_e Appearance and ν_μ Disappearance in NO ν A. Phys. Rev. Lett. 118, 231801. DOI: 10.1103/PhysRevLett.118.231801
- **2016** P. Adamson, *et al.* (MINOS Collab.) **The NuMI neutrino beam**. Nucl. Instr. Meth. A **806**, 279-306. DOI: 10.1016/j.nima.2015.08.063
 - P. Adamson, et al. (NO ν A Collab.) First measurement of muon-neutrino disappearance in NO ν A. Phys. Rev. D **93**, 051104(R). DOI: 10.1103/PhysRevD.93.051104
 - P. Adamson, et al. (MINOS Collab.) Measurement of the multiple-muon charge ratio in the MINOS Far Detector. Phys. Rev. D 93, 052017. DOI: 10.1103/PhysRevD.93.052017

- P. Adamson, et al. (NO ν A Collab.) First Measurement of Electron Neutrino Appearance in NOvA. Phys. Rev. Lett. **116**, 151806. DOI: 10.1103/PhysRevLett.116.151806
- P. Adamson, *et al.* (Daya Bay Collab., MINOS Collab.) **Limits on Active to Sterile Neutrino Oscillations from Disappearance Searches in the MINOS, Daya Bay, and Bugey-3 Experiments**. Phys. Rev. Lett. **117**, 151801. DOI: 10.1103/PhysRevLett.117.151801
- P. Adamson, et al. (MINOS Collab.) Search for Sterile Neutrinos Mixing with Muon Neutrinos in MINOS. Phys. Rev. Lett. 117, 151803. DOI: 10.1103/PhysRevLett.117.151803
- P. Adamson, et al. (MINOS Collab.) Measurement of single π^0 production by coherent neutral-current ν Fe interactions in the MINOS Near Detector. Phys. Rev. D **94**, 072006. DOI: 10.1103/PhysRevD.94.072006
- P. Adamson, et al. (MINOS Collab.) Constraints on large extra dimensions from the MINOS experiment. Phys. Rev. D **94**, 111101(R). DOI: 10.1103/PhysRevD.94.111101
- 2015 P. Adamson, et al. (MINOS Collab.) Observation of seasonal variation of atmospheric multiple-muon events in the MINOS Near and Far Detectors. Phys. Rev. D 91, 112006. DOI: 10.1103/Phys-RevD.91.112006
 - P. Adamson, et al. (MINOS Collab.) Study of quasielastic scattering using charged-current ν_{μ} -iron interactions in the MINOS near detector. Phys. Rev. D **91**, 012005. DOI: 10.1103/Phys-RevD.91.012005
 - P. Adamson, et al. (MINOS Collab.) Precision measurement of the speed of propagation of neutrinos using the MINOS detectors. Phys. Rev. D 92, 052005. DOI: 10.1103/PhysRevD.92.052005
- 2014 P. Adamson, et al. (MINOS Collab.) Combined Analysis of ν_{μ} Disappearance and $\nu_{\mu} \rightarrow \nu_{e}$ Appearance in MINOS Using Accelerator and Atmospheric Neutrinos. Phys. Rev. Lett. 112, 191801. DOI: 10.1103/PhysRevLett.112.191801
 - P. Adamson, et al. (MINOS Collab.) **Observation of muon intensity variations by season with the MINOS near detector**. Phys. Rev. D **90**, 012010. DOI: 10.1103/PhysRevD.90.012010
- 2013 P. Adamson, et al. (MINOS Collab.) Measurement of Neutrino and Antineutrino Oscillations Using Beam and Atmospheric Data in MINOS. Phys. Rev. Lett. 110, 251801. DOI: 10.1103/Phys-RevLett.110.251801

Proceedings

- 2021 S. R. Johnson, S. C. Tognini, *et al.* Novel features and GPU performance analysis for EM particle transport in the Celeritas code. vCHEP2021: 25th International Conference on Computing in High-Energy and Nuclear Physics. [REF. PLACEHOLDER].
- **2020** T. M. Evans, S. R. Johnson, *et al.* **Celeritas—a nascent GPU detector simulation code**. Letter of Interest for Snowmass 2021.
- 2017 A. Habig, M. Goodman, P. Schreiner, S. C. Tognini, and R. A. Gomes. (On behalf of the NOνA Collaboration) Seasonal Variation of Multiple-Muon Events in MINOS and NOvA. 35th International Cosmic Ray Conference (ICRC), Bexco, Busan, Korea. DOI: 10.22323/1.301.0200
- 2012 S. C. Tognini and R. A. Gomes. Simulation of atmospheric temperature effects on cosmic ray muon flux. NuInt12: Eight International Workshop on Neutrino-Nucleus Interactions in the Few-GeV Region, Rio de Janeiro (RJ), Brazil. AIP Conf. Proc. 1663, 120015. DOI: 10.1063/1.4919521