

# Publications

## Journals

1. Nath, A., and Francis, Ng. K., “Detection techniques and investigation of different neutrino experiments”, *International Journal of Modern Physics A*, Vol. 36, No. 13, 2130008 (45 pages), 2021 [10.1142/S0217751X21300088](https://doi.org/10.1142/S0217751X21300088).
2. Cao, S., Nath, A., Ngoc, T. V., Francis, Ng. K., Hong Van, N. T., and Quyen, P. T., “Physics potential of the combined sensitivity of T2K-II, NO $\nu$ A extension, and JUNO”, *Physical Review D*, Vol. 103, Issue 11, pages 112010, 2021 <https://link.aps.org/doi/10.1103/PhysRevD.103.112010>.

## Book Chapters

1. Nath, A., “Detection methods and neutrino oscillation experiments”, *Advances in Physics and Application-2020, Duliajan College*, ISBN: 978-93-91953-06-5, 2021.
2. Nath, A., and Francis, Ng. K., “Precision measurements of atmospheric mixing parameters and octant resolving”, *Advances in Physics and Application-2020, Duliajan College*, ISBN: 978-93-91953-06-5, 2021.

## Conferences Proceedings

1. Francis, Ng. K., and Nath, A., “The Effects of Majorana Phases in Estimating the Masses of Neutrinos”, *International Journal of Modern Physics: Conference Series*, Vol. 47, 1860100, 2018 <https://doi.org/10.1142/S201019451860100X>.

## POSTERS/ORAL PRESENTATION/PAPERS PRESENTED IN CONFERENCES

1. Nath, A., and Francis, Ng. K., International Conference on Recent Issues in Nuclear and Particle Physics, Visva-Bharati, West Bengal, India, Feb 3-5, 2019.
2. Nath, A., Cao, S., Ngoc, T. V., Van, N. T., Quyen, P. T., and Francis, Ng. K., XXIX International Conference on Neutrino Physics and Astrophysics, Fermilab, USA, Jun 22-Jul 2, 2020.
3. Nath, A., and Francis, Ng. K., International E-Conference on New Frontiers in Science and Technology, Research Institute of Science and Technology, Manipur University Campus, India, Jul 9-11, 2020.
4. Nath, A., and Francis, Ng. K., International e-Poster Conference on “Advances in Physics and Applications”, Duliajan College, Dibrugarh University, Assam, India, Nov 23-28, 2020. (*presented two papers*)
5. Nath, A., and Francis, Ng. K., XXIV DAE-BRNS Symposium on High Energy Physics, NISER, Jatni, Odisha, India, Dec 14-18, 2020.

## WORKSHOPS/SCHOOLS ATTENDED

1. *Electroweak Symmetry Breaking, Flavour Physics and BSM*, Indian Institute of Technology, Guwahati, December 18-22, 2017.
2. *Vietnam School on Neutrinos*, ICISE, Quy Nhon, Vietnam, July 7-19, 2019.
3. *SERB Preparatory School on Theoretical High Energy Physics*, Department of Physics, Tezpur University, October 14 - November 9, 2019.
4. *Workshop on Particle Physics*, Department of Physics, Assam Don Bosco University, August 17-31, 2020.
5. *Neutrinos: Here, There & Everywhere - International Summer School 2021*, PhD School of SCIENCE, Niels Bohr Institute, University of Copenhagen, July 26-30, 2021 (*Course no.: 5915-21-11-31, Credits earned: 2.50*).

# About

Ankur Nath was born in the state of Assam, India. He obtained his schooling and higher secondary education in Assam. Later, he moved to Shillong, Meghalaya and completed his B.Sc. in Physics at St. Anthony's College. He received his masters degree in Physics in the year 2016 from North Eastern Hill University, Meghalaya, India. He enrolled into the Ph.D. course in 2017 under Dr. Ng. K. Francis, Associate Professor, Department of Physics, Tezpur University. He also visited the Institute For Interdisciplinary Research in Science and Education (IFIRSE) in mid-2019 and conducted his doctoral research in collaboration with Dr. Son Cao.