

**JOB DESCRIPTION**

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| **Job Title:** Senior Research Associate in Particle Physics (T2K experiment) | **Present Grade:** 7 |
| **Department/College:** Department of Physics | |
| **Directly responsible to:** Professor Helen O’Keeffe | |
| **Supervisory responsibility for:** Some co-supervision of postgraduate students and supervision of MPhys project students. | |
| **Other contacts** | |
| **Internal:**  Physics Department staff and students, colleagues in other faculties, library personnel, ISS and central administration staff. | |
| **External:**  Members of the T2K collaboration, professional bodies, research funding bodies and councils, academic and research networks. | |
| The successful applicant will support the activities of the Lancaster University Tokai to Kamioka (T2K) group in their exploitation of data from the experiment located in Japan. They will focus on leading the delivery of high-quality physics results within the group’s established programme and using such results to define future analysis directions within the group.  This position will be based in the Experimental Particle Physics group of the Lancaster University Physics Department. National and international travel (especially to J-PARC in Tokai, Japan), is anticipated.  **Major Duties:**   1. Analysis of data from the T2K experiment. Specifically, a significant, leading role in the analysis of data from the near detector and upgraded near detector to develop particle identification methods and new selections for (anti)neutrino interactions is expected. 2. Support supervision of PhD students working on the T2K experiment. 3. Supervise summer and/or undergraduate projects working with the T2K group in Lancaster. 4. Work with colleagues to identify next stage or new analyses using the T2K data. 5. Provide input to grant applications supporting the T2K experiment work at Lancaster. 6. Apply for funding to attend conferences and/or for extended visits to the experiment site as required. 7. Write technical documents to capture results. 8. Publish results in leading, peer-reviewed academic journals. 9. Present results at international conferences, collaboration meetings (virtually and/or in person) and Lancaster group meetings. | |