

CURRICULUM VITAE

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March 10, 2017

ACADEMIC APPOINTMENTS

- **06/2014 - present, Associate Professor (Reader) in Experimental Particle Physics**
Department of Physics, University of Liverpool
- **05/2016 - present, Staff Scientist (F - Principal Scientific Officer)**
Particle Physics Department, Rutherford Appleton Laboratory, Science & Technology Facilities Council
- 10/2008 - 04/2016, Staff Scientist (E - Senior Scientific Officer)
Particle Physics Department, Rutherford Appleton Laboratory, Science & Technology Facilities Council
- 02/2007 - 09/2008, Staff Scientist (D - Higher Scientific Officer)
Particle Physics Department, Rutherford Appleton Laboratory, Science & Technology Facilities Council
- 06/2003 - 01/2007, Post-Doctoral Research Associate
Particle Physics Department, Rutherford Appleton Laboratory, Science & Technology Facilities Council
- 09/1996 - 06/2003, Graduate Research Assistant
Physics Department, University of Athens

EDUCATION

- 03/1999 - 06/2003, **PhD** in Experimental Particle Physics, University of Athens
Thesis: 'Experimental Study of the Phenomenon of Neutrino Oscillations with the MINOS Experiment', UA/PHYS/HEP/02-06-2003; FERMILAB-THESIS-2003-39 (in Greek). Advisor: Prof. George Tzanakos
- 09/1996 - 11/1998, **MSc** in Nuclear and Particle Physics, University of Athens
Thesis: 'Calibration of a Prototype Electromagnetic Calorimeter for the COSMOS $\nu_\mu \leftrightarrow \nu_\tau$ Neutrino Oscillation Experiment', UA/PHYS/HEP/13-11-1998 (in Greek). Advisor: Prof. George Tzanakos
- 09/1992 - 09/1996, **BSc** in Physics, University of Athens

LEADERSHIP

- 2017-present, SBND Physics and Analysis Tool Co-Coordinator
- 2015-2017, DUNE Near Detector Evaluation WG Coordinator.
- 2014-present, DUNE-UK WP.1 (Physics Simulation and Experiment Design) Co-Coordinator.
- 2014-2015, Member of the T2K Analysis Steering Group.
- 2010-present, Coordinator of the VALOR Fitting Group.
- 2014-present, co-Spokesperson of the GENIE Collaboration.
- 2014-present, Member of the GENIE Executive Board.
- 2014-present, GENIE Tuning and Systematics WG Coordinator.
- 2006-2010, MINOS Physics Simulation WG Co-Coordinator.

PROFESSIONAL SERVICE

Project

- 2013 - present, T2K-UK budget holder.

Departmental

- 2014 - present, Member of the Departmental Research Excellence Framework (REF) Coordination Committee, Physics Dept., University of Liverpool

PhD examinations

- 2016, 1st year PhD viva panel member, University of Liverpool
- 2015, PhD viva internal examiner, Thomas Stainer, University of Liverpool

Reviewing and editorial roles

- Ad-hoc referee for Europhysics Letters, European Physical Journal Plus, Advances in High Energy Physics, Nuclear Instruments & Methods in Physics Research A, Particle Data Group.
- 2014 - present, Proposal Reviewer, National Science Center, Poland
- 2011 - present, Internal referee and member of the paper committee for various T2K analyses.
- 2012 - present, Member of Editorial Board, Scientific World Journal and Dataset Papers in Physics Journal, High Energy Physics section.

Conference and school organization

- 2016, Member of the Scientific Organizing Committee, PHYSTAT-nu workshop, Fermilab, September 19-21.
- 2016, Chair, International Workshop on Global Fits to Neutrino Scattering Data and Generator Tuning (NuTune2016), Liverpool, July 11-15.
- 2015, Member of the Organizing Committee, NuSTEC Training in Neutrino Nucleus Scattering Physics, Okayama University, November 8-14.
- 2014, Member of the Organizing Committee, NuSTEC Training in Neutrino Nucleus Scattering Physics, Fermilab, October 16-27.
- 2014, Member of the Scientific Programme Committee, NuINT14 workshop, London, May 19-24 (co-Organized 'Neutrino Interaction Systematics for Oscillation Experiments' session).
- 2014, Co-Chair of the Organizing Committee, NuSTEC MC Generator School, Liverpool, May 14-16.

Mentoring

- 2015 - present, Academic advisor, University of Liverpool

AWARDS AND PRIZES

- 2016, 2015, 2009, Institute of Particle Physics Phenomenology (Durham Univ.) Associateship awards
- 2016, Breakthrough Prize (shared - Daya Bay, KamLAND, SNO, T2K, K2K and SuperK Collaborations)
- 2011, Le Prix La Recherche award (shared - T2K Collaboration)
- 1999 - 2002, Greek National Scholarship Foundation (IKY) award

RESEARCH INCOME

Research funding in the UK is centralized. My current research is funded predominantly by the Science and Technology Facilities Council (STFC) through a) research grants awarded to the T2K-UK and DUNE-UK projects, b) a *Consolidated Grant* awarded to the Liverpool Particle Physics group, and c) support for in-house particle physics research programme at STFC's national laboratories and, in particular, at the Particle Physics Department of the Rutherford Appleton Laboratory, aiming to underpin and support the overall UK particle physics programme.

Recent awards:

- 2015, Liverpool Particle Physics Consolidated Grant, Co-Investigator (£6.6M)

STUDENT SUPERVISION

PhD

- 2016 - present, Supervising Mr. Francis Bench, University of Liverpool, PhD candidate.
- 2016 - present, Co-supervising¹ Mrs. Rhiannon Jones, University of Liverpool, PhD candidate.
- 2014 - present, Supervising Mr. Christopher Barry, Univ. of Liverpool, PhD candidate.
- 2011 - 2015, Co-supervised² Dr. Steve Dennis, RAL & University of Warwick, PhD 2015.
Thesis: '*Muon-Antineutrino Disappearance and Non-Standard Interactions at the T2K Experiment*', T2K-THESIS-069.
- 2011 - 2014, Co-supervised³ Dr. Lorena Escudero Sanchez, CSIC and University of Valencia, PhD 2014.
Thesis: '*Joint Analysis of Three Flavour Neutrino Oscillations Combining the Electron-Neutrino Appearance and Muon-Neutrino Disappearance Channels in the T2K Experiment*', T2K-THESIS-070.
- 2010 - 2014, Co-supervised⁴ Dr. Thomas Dealtry, RAL & University of Oxford, PhD 2014.
Thesis: '*Muon-Neutrino Disappearance with the T2K Beam*', T2K-THESIS-057.
- 2008 - 2011, Co-supervised⁵ Dr. James Dobson, Imperial College London, PhD 2012.
Thesis: '*Neutrino-Induced Charged-Current π^+ Production at the T2K Near Detector*', T2K-THESIS-019

MPHYS

- 2016 - 2017, Supervising Mr. Jake Jackson, University of Liverpool.
Project: '*Sensitivity of Sterile Neutrino Searches at the Fermilab Short Baseline Neutrino Programme*'.
- 2016 - 2017, Supervising Mr. Jack Ringwood, University of Liverpool.
Project: '*Effects of Neutrino Interaction Uncertainties in Long-Baseline Accelerator-Based Searches for Neutrino CP Violation and the Determination of the Neutrino Mass Ordering*'.
- 2016 - 2017, Supervising Mr. Jonathan Stott, University of Liverpool.
Project: '*Effects of Neutrino Interaction Uncertainties in Accelerator-Based Sterile Neutrino Searches*'.
- 2016 - 2017, Supervising Mr. James Taylor, University of Liverpool.
Project: '*Statistical Issues in Precision 3-Flavour Oscillation Measurements in Long-Baseline Accelerator-Based Experiments*'.

¹With Prof. Christos Touramanis, University of Liverpool.

²With Dr. Gary Barker and Dr. Steve Boyd, University of Warwick.

³With Dr. Anselmo Cervera, IFIC.

⁴With Prof. Alfons Weber, RAL & University of Oxford.

⁵With Dr. Yoshi Uchida, Imperial College London.

TEACHING

Liverpool

- 2016-17, Project supervisor, PHYS 498 (MPHYS Project)
- 2014-17, Module organiser and lecturer, PHYS 201 (Electromagnetism)
- 2015-17, Tutor, PHYS 480 (Advanced Quantum Physics).
- 2014-16, Moderator and/or monitor for several modules.

External

- 2017, Lecturer (Simulation of Neutrino Interaction Physics), MCnet Summer School, Lund, Sweden.
- 2014, Tutor, UK High Energy Physics Summer School, Univeristy of Warwick.
- 2014, Lecturer, NuSTEC Neutrino Generator School, Liverpool.
- 2013, Tutor, UK High Energy Physics Summer School, Univeristy of Warwick.
- 2012, Tutor, UK High Energy Physics Summer School, Sommerville College, Oxford.
- 2009, Lecturer, 45th Karpacz Winter School in Theoretical Physics, Ladek-Zdroj, Poland.
- 2009, Lecturer, GENIE course, Fermilab.
- 2008, Lecturer, GENIE course, TRIUMF.
- 2007, Lecturer, GENIE course, Rutherford Appleton Lab.
- 1997 - 2002, Demonstrator, University of Athens, Physics Laboratory and Nuclear Physics Laboratory

PROFESSIONAL AFFILIATIONS

- 2010 - present, Member of Institute Of Physics (IOP)
- 2000 - present, Member of Hellenic Society for the Study of High Energy Physics (EESFYE)

RESEARCH COLLABORATION MEMBERSHIPS

- 2014-present, DUNE experiment, Fermilab
- 2014-present, Hyper-Kamiokande experiment, J-PARC
- 2014-present, SBND experiment, Fermilab
- 2007-present, T2K experiment, J-PARC
- 2002-present, GENIE event generator [co-spokesperson]
- 1999-2010, MINOS experiment, Fermilab
- 1997-2003, DONUT experiment, Fermilab
- 1997-1998, COSMOS experiment, Fermilab

RESEARCH

Overview of current research effort and objectives

My research is focussed on accelerator neutrino physics and, in particular, in the experimental study of neutrino flavour mixing. Using neutrino oscillations as a tool, I aim to understand the observed baryon asymmetry in the universe by searching for leptonic charge-parity (CP) invariance violation and identifying its origin. I perform high-precision measurements of the neutrino mixing angles to uncover new discrete symmetries of lepton flavour mixing and understand the connections between the quark and lepton sectors. I investigate the validity of the established 3-flavour (PMNS) paradigm either indirectly, by over-constraining the PMNS matrix, or through direct experimental searches for sterile neutrinos.

I conduct my research on several experiments, maintaining a balanced portfolio including running experiments and new proposed experiments, both medium-term and long-term ones. I am taking a leading part in the physics exploitation of the T2K experiment in Japan, and I play a central role in preparations for the physics exploitation of the SBN programme at Fermilab. I am also actively involved with R&D towards the

realization of the DUNE experiment in US - the world's next flagship neutrino experiment. In the past, I contributed to the MINOS and DONUT experiments.

Performing world-leading neutrino mixing measurements is my most salient scientific research output. I am the founder and coordinator of the international **VALOR** neutrino fitting group⁶. The group was established within the T2K experiment in 2010 and it plays a leading role in the overall oscillation analysis output of the T2K experiment. Both through personal analysis efforts and coordination of the VALOR fitting group, I led numerous flagship T2K oscillation analyses and contributed to most published T2K oscillation papers (details may be found in later sections). One of my main research objectives is the continuation of the T2K physics exploitation and the improvement of the VALOR analysis techniques for the unprecedented exposure level and systematic error regime in which T2K operates. A further objective, which I now pursue at a prototyping level, is the combination of the T2K and NOvA oscillation measurements. Joint oscillation fits will play a critical role in exploiting the complementarities between experiments, but a marked improvement is needed in the treatment of correlated flux and cross-section systematics. My aim is to bring a definite improvement and develop VALOR as the most widely-accepted methodology for the joint analysis of accelerator long-baseline neutrino experiments.

In the medium term, data from the short-baseline neutrino programme (SBN) at Fermilab will identify the origin of the MiniBooNE anomaly and bring a generational advance in the study of neutrino interaction physics. I serve as a Physics and Analysis Tool co-Coordinator for SBND and I lead preparations for physics analyses with the first neutrino data expected in 2018. My interest lies primarily in developing the vast neutrino interaction measurement programme possible at SBND. I am also actively involved in the overall SBN analysis effort: I lead the development of a systematic constraint and oscillation fit, based on VALOR, which combines several exclusive samples from all SBN experiments.

I also play a visible role in physics sensitivity and design optimisation studies for future experiments. VALOR informs the design of O(\$10^9\$)-scale experiments with the best-practises employed for the actual data analysis of leading running experiments. In DUNE, I delivered the first-ever oscillation sensitivity calculations from an end-to-end analysis using full event simulation and reconstruction. Currently, our VALOR work provides the only physics analysis link between the proposed Near Detector Systems and the Far Detector, incorporating a comprehensive evaluation of in-situ systematic constraints into the DUNE oscillation sensitivity calculations. My group will play a leading role in delivering physics studies for the DUNE physics TDR and CD-2 approval.

Another special interest of mine lies in the field of neutrino interaction phenomenology and computer simulations: I am the founder and co-Spokesperson of the international **GENIE** collaboration⁷ which is responsible for the most widely-used neutrino interaction physics simulation. GENIE provides an interface between theory and experiment and it plays a critical role in precision measurements of neutrino mixing. Embedding scarce experimental constraints and theoretical inputs in a consistent physics framework and improving the modelling of neutrino interaction physics, as well as understanding the modelling uncertainties and limitations, underlies all modern neutrino data analysis efforts. Today, GENIE's predictions serve as a 'standard candle' and GENIE plays an important role at the exploitation of the world neutrino program and in the design of future facilities. In addition, through its successful Incubator, GENIE provides central coordination of community-wide development efforts. My vision for the future of GENIE is to develop it into the leading global analysis of neutrino scattering data: Currently, I serve as the GENIE Tuning and Systematics WG Coordinator and I closely oversee the development of that effort.

Contributions to the SBND Experiment

- SBND Physics and Analysis Tool Development Co-Coordinator (2017-present)

Contributions to the DUNE Experiment

- DUNE Near Detector Evaluation WG Coordinator (2015-2017).
- DUNE-UK WP.1 (Physics Simulation and Experiment Design) Coordinator (2014-present).
- Lead the development the first end-to-end oscillation analysis for DUNE using full detector simulation and reconstruction. This advanced VALOR-based joint oscillation and systematics constraint fit to O(50) Near and Far detector topological samples was developed in collaboration with RA's S.Dennis and L.Escudero. The analysis allowed the characterization of the physics capabilities of several proposed Near Detector options and the oscillation physics driven optimization of the DUNE Near Detector complex.

Contributions to the T2K Experiment

- Member of the Analysis Steering Group (2014-present).

⁶<https://valor.pp.rl.ac.uk/>

⁷<http://www.genie-mc.org>

- Chair of the review committee of the T2K near detector ν_e -disappearance (sterile) analysis (2013).
- Member of the ν_μ -disappearance contour (statistics) committee (2011).
- Member of the paper committee for the first T2K ND280 sterile neutrino (ν_e -disappearance) paper (2014).
- Member of the paper committee for the first T2K ν_μ -disappearance paper (2011).
- Both through personal analysis efforts and coordination of the VALOR fitting group, I delivered many official T2K oscillation analysis results⁸:
 - Performed T2K ν_μ -disappearance analyses of the Run 1, Run 1-2, Run 1-3 and Run 1-4 [*Dealtry PhD*] datasets. The Run 1-2 result, published in PRD 85:031103 (2012), is the first ever published study of ν_μ -disappearance in an off-axis experiment. The subsequent results published in PRL 111:211803 (2013) and PRL 112:181801 (2014) are the world's most stringent constraint on the ν_μ -disappearance parameters.
 - Performed the first T2K full 3-flavour oscillation analysis by combining the ν_μ -disappearance and ν_e -appearance analyses and performing a simultaneous measurement of Δm_{32}^2 , θ_{23} , θ_{13} and δ_{CP} . Full 3-flavour oscillation analyses were performed with the Run 1-3 and Run 1-4 datasets [*Escudero PhD*]. Our Run 1-4 results were published in PRD 91:072010 (2015).
 - Performed the first T2K $\bar{\nu}_\mu$ -disappearance analysis with Run 5-6 data [*Dennis PhD*]. This result was published in PRL 116:181801 (2016).
 - Performed a full 3-flavour oscillation analysis combining all neutrino and antineutrino data. This work produced the most stringent limits on the CP violating phase δ_{CP} , yielding hints for leptonic CP violation (PRL in preparation).
- Measured the rate of charged-current π^+ production in the T2K off-axis near detector [*Dobson PhD*].
- Developed a GENIE-based event generation application integrating the T2K neutrino beam-line and detector geometry descriptions. This work provided the first realistic neutrino event simulation in the entire suite of T2K detectors.
- Developed methods for propagating neutrino interaction physics uncertainties in T2K physics analyses.
- Designed, prototyped, developed and commissioned the light-injection DAQ control software for the T2K off-axis near detector electromagnetic calorimeters.

Contributions to the MINOS Experiment

- Served as Physics Simulations Working Group co-convenor (2006 - 2010) and made major intellectual contributions. Our work provided the physics model and uncertainty evaluations used for all published MINOS results.
- Developed and commissioned Fully-Automated Test Stations (at the Universities of Athens and Texas at Austin) for the Hamamatsu M16 multi-anode photo-multipliers (PMTs) used at the MINOS far detector. Had the main responsibility for the operation of the Athens Station and the full characterization of the PMTs tested at that station. Between November 2001 and December 2002, using the Athens Station in 24/7 operation, I tested and characterized almost half of all MINOS far detector PMTs (~ 500 PMTs corresponding to $\sim 64,000$ optical channels).
- Participated in the commissioning effort and in data-taking operations of the MINOS 4 Plane Prototype (4PP), the first full integration of all MINOS far detector sub-systems assembled at the New Muon Lab at Fermilab (June - August 2000). Developed the entire MINOS 4PP offline software, analyzed the cosmic-ray and light-injection data, calibrated the prototype detector and characterized the prototype performance.
- Participated in the assembly and commissioning of the MINOS far detector in Soudan mine (September - December 2002).
- Performed magnetic-field calculations for both MINOS detector using spatial tessellation techniques, worked on early atmospheric-neutrino MC and sensitivity studies, developed neural networks for event classification, contributed event reconstruction and data quality algorithms to the offline software.

⁸T2K collected data in several periods with different conditions and proton-on-target (POT) exposures, both in neutrino-enhanced Forward Horn Current (FHC) and antineutrino-enhanced Reversed Horn Current (RHC) modes: Run 1 (01-06/2010, FHC: 0.323×10^{20} POT), Run 2 (10/2010-03/2011, FHC: 1.108×10^{20} POT), Run 3 (03-06/2012, FHC: 1.579×10^{20} POT) and Run 4 (10/2012-05/2013, FHC: 3.560×10^{20} POT), Run 5 (05-06/2014, FHC: 0.242×10^{20} POT and RHC: 0.506×10^{20} POT), Run 6 (10/2014-06/2015, FHC: 0.190×10^{20} POT and RHC: 3.505×10^{20} POT), and Run 7 (02-05/2016, FHC: 0.480×10^{20} POT and RHC: 3.460×10^{20} POT).

Contributions to the DONUT Experiment

- Participation in the data-taking operations (July - October 1997).
- Calibration of the electromagnetic calorimeter.

Contributions to the COSMOS Experiment

- Exposure of a prototype electromagnetic calorimeter at a Fermilab test-beam (July - October 1997).
- Calibration of a prototype electromagnetic calorimeter.

PRESENTATIONS AT WORKSHOPS, CONFERENCES, SEMINARS

International Physics Workshops, Symposia and Conferences

- ‘The VALOR Oscillation Analysis in T2K/HK, DUNE and SBN’ (Invited talk), Topical Meeting on Neutrino-Nucleus Scattering, 18-20 April 2017, Durham, UK.
- ‘Future Neutrino Experiments’ (Invited Talk), 25th International Workshop on Deep Inelastic Scattering and Related Topics (DIS17), 3-7 April 2017, Birmingham, UK
- ‘High-pressure gaseous Argon TPC Near Detector option for DUNE’, 2nd Workshop on Neutrino Near Detectors based on gas TPC, 20-21 March 2017, CERN.
- ‘GENIE Status and Prospects - Simulations Underpinning Discovery and Precision Measurements’ (Invited talk), International Workshop on Frontiers in Electroweak Interactions of Leptons and Hadrons (EILH16), 2-6 November 2016, Aligarh, India.
- ‘GENIE Update’ (Invited talk), 10th International Workshop on Neutrino-Nucleus Interactions (NuINT15), 16-21 November 2015, Osaka, Japan.
- ‘Experimental Neutrino Physics’ (Invited lecture), CORFU14 Summer School and Workshop on the Standard Model and Beyond, 3-14 September 2014, Mon-Repos, Corfu, Greece.
- ‘LBNE Flux and Cross-Section Systematic Constraints for 3-Flavour Oscillation Sensitivity Simulation’, CETUP*14, 10-31 July 2014, Lead, SD, USA.
- ‘GENIE Update (Invited talk), 9th International Workshop on Neutrino-Nucleus Interactions (NuINT14), 19-24 May 2014, London, UK.
- ‘T2K Status and Prospects’ (Invited talk), International Committee for Future Accelerators (ICFA) - European Neutrino Town Meeting, 8-10 January 2014, Paris Diderot University, France.
- ‘Electron scattering data and its use in constraining neutrino models’ (Invited review talk), 6th International Workshop on Neutrino-Nucleus Interactions (NuINT09), 18-22 May 2009, Sitges, Barcelona, Spain.
- ‘The path forward: Monte Carlo convergence’ (Invited talk), 6th International Workshop on Neutrino-Nucleus Interactions (NuINT09), 18-22 May 2009, Sitges, Barcelona, Spain.
- ‘The GENIE Universal Neutrino MC Generator’, 45th Karpacz Winter School in Theoretical Physics (Neutrino interactions: from theory to Monte Carlo simulations), 2-11 February, 2009, Łądek-Zdrój, Poland.
- ‘Recent Results from the MINOS Experiment’ (Invited talk), International Nuclear Physics Conference 2007 (INPC-2007), 3-8 June 2007, Tokyo, Japan.
- ‘Recent Results from the MINOS Experiment’ (Invited talk), International Workshop on Double Beta Decay & Neutrinos (DBD-2007), 11-13 June 2007, Osaka, Japan.
- ‘Overview of Progress in Neutrino Simulation Codes’ (Invited review talk), 5th International Workshop on Neutrino-Nucleus Interactions (NuINT07), 31 May - 3 June 2007, Fermilab, Chicago IL, USA.
- ‘The GENIE Universal Neutrino MC Generator’ (Invited talk), 3rd International Scoping Study’, 24-28 April 2006, Rutherford Appleton Lab, UK.
- ‘Neutrino MC Generators and Nuclear Effects’ (Invited talk), 20th Max Born Symposium (Nuclear Effects in Neutrino Interactions), 7-11 December 2005, Wroclaw, Poland.
- ‘The GENIE Universal Neutrino MC Generator’, 4th International Workshop on Neutrino-Nucleus Interactions (NuINT05), 26-29 September 2005, Okayama University, Okayama, Japan.

- ‘Neutrino Interaction Physics and Neutrino MC Event Generators’ (Invited talk), Next Generation of Nucleon Decay and Neutrino Detectors (NNN05), 7-9 April 2005, Aussois, Savoie, France.
- ‘Neutrino Interaction Model Validation’, 3rd International Workshop on Neutrino-Nucleus Interactions (NuINT04), 17-21 March 2004, Laboratori Nazionali del Gran Sasso - INFN, Assergi (L’Aquila), Italy.
- ‘The MINOS Experiment: Current Status and Atmospheric Neutrino Studies’, Recent Advances in High Energy Physics (HEP2003) Annual Meeting Of The Hellenic Society For The Study Of High Energy Physics, 17-29 April 2003, Athens, Greece.
- ‘MINOS Experiment: Characterization of multi-anode PMTs for the MINOS detectors’, Recent Advances in High Energy Physics (HEP2002) Annual Meeting Of The Hellenic Society For The Study Of High Energy Physics, 25-27 April, 2002, Patra, Greece.
- ‘Development of the MINOS detectors’, Recent Advances in High Energy Physics (HEP2001) Annual Meeting Of The Hellenic Society For The Study Of High Energy Physics, 6-8 April 2001, Heraklion, Greece.
- ‘MINOS: Prototype Detector and Toroidal Magnetic Field’, Recent Advances in High Energy Physics (HEP2000) Annual Meeting Of The Hellenic Society For The Study Of High Energy Physics, April 2000, Ioannina, Greece.

Seminars and Colloquia

- ‘Recent results from the T2K experiment on CP violation in the lepton sector’, Cambridge University, 07/03/2017.
- ‘Neutrino Oscillation Results from T2K’, Manchester University, 19/01/2012.
- ‘Neutrino Oscillation Results from T2K’, Birmingham University, 19/10/2011.
- ‘First Neutrino Oscillation Results from T2K’, University College London, 27/05/2011.
- ‘First Neutrino Oscillation Results from T2K’, Rutherford Appleton Lab, 25/05/2011.
- ‘First Neutrino Oscillation Results from T2K’, Sussex University, 12/05/2011.
- ‘First Neutrino Oscillation Results from T2K’, Cambridge University, 10/05/2011.
- ‘First Neutrino Oscillation Results from T2K’, Bristol University, 04/05/2011.
- ‘Neutrino Interaction Modeling and Systematic Uncertainties’, IPPP Durham, 25/01/2010.
- ‘Neutrino Interaction Modeling and Systematic Uncertainties’, Paris LPNHE, GDR Neutrino, 27-28/04/2009.
- ‘The GENIE Neutrino MC Generator’, Imperial College London, 18/03/2008.
- ‘Feedback from the NuINT07, INPC07 and DBD07 conferences’, Rutherford Appleton Lab, 08/08/2007.
- ‘Neutrino Interaction Phenomenology’, Rutherford Appleton Lab, 03/03/2006.
- ‘The GENIE Neutrino MC Generator’, Strasbourg IReS, GDR Neutrino, 02-03/02/2006.
- ‘The MINOS Experiment: First Beam Data and Neutrino-Interaction Modeling’, Imperial College London, 17/11/2005.
- ‘Feedback from the NuINT05 conference’, Rutherford Appleton Lab, 02/11/2005.
- ‘Neutrino Oscillations & Interactions: A Review’, Rutherford Appleton Lab, 22/10/2004.
- ‘The MINOS Experiment’, University College London, 27/05/2004.
- ‘Feedback from the NuINT04 conference’, Rutherford Appleton Lab, 28/04/2004.
- ‘MINOS: Detector Development and Data Exploitation’, Rutherford Appleton Lab, 15/10/2003.

LIST OF PUBLICATIONS AND INTERNAL NOTES

| Citations Summary | |
|--|-------|
| Number of papers published in peer-reviewed journals | 61 |
| Number of citations | 7865 |
| Citations per paper (average) | 128.9 |
| h_{HEP} index | 37 |

From *INSPIRE HEP*, Updated on 28th November, 2016

Neutrino Interaction Phenomenology (peer reviewed)

- The GENIE Collaboration (C. Andreopoulos et al.), The GENIE Neutrino Monte Carlo Generator, Nucl.Instrum.Meth. A614 (2010) 87-104.
- T.Yang, C.Andreopoulos, H.Gallagher, K.Hoffmann and P.Kehayias, A Hadronization Model for few-GeV Neutrino Interactions, Eur.Phys.J. C63 (2009) 1-10.
- C. Wilkinson et al., Testing CCQE and 2p2h models in the NEUT neutrino interaction generator with published datasets from the MiniBooNE and MINERvA experiments, Phys.Rev. D93, 072010 (2016).

T2K Experiment (peer reviewed)

- The T2K Collaboration (K. Abe et al.), Measurement of Coherent π^+ Production in Low Energy Neutrino-Carbon Scattering, arXiv:1604.04406[hep-ex].
- The T2K Collaboration (K. Abe et al.), Measurement of Double-Differential Muon Neutrino Charged-Current Interactions on C_8H_8 Without Pions in the Final State using the T2K Off-axis Beam, Phys.Rev. D93 (2016) 112012.
- The T2K Collaboration (K. Abe et al.), Measurement of muon anti-neutrino oscillations with an accelerator-produced off-axis beam, Phys.Rev.Lett. 116, 181801 (2016).
- The T2K Collaboration (K. Abe et al.), Measurement of the Muon Neutrino Inclusive Charged-Current Cross Section in the Energy Range of 1-3 GeV with the T2K INGRID Detector, Phys. Rev. D93 (2016) 072002.
- The T2K Collaboration (K. Abe et al.), Measurement of the Electron Neutrino Charged-current Interaction Rate on Water with the T2K ND280 π^0 Detector, Phys.Rev. D91 112010 (2015).
- The T2K Collaboration (K. Abe et al.), Measurement of the ν_μ charged current quasielastic cross section on carbon with the T2K on-axis neutrino beam, Phys.Rev. D91,112002 (2015).
- The T2K Collaboration (K. Abe et al.), Upper bound on neutrino mass based on T2K neutrino timing measurements, Phys.Rev. D93 (2016), 012006.
- The T2K Collaboration (K. Abe et al.), Measurements of neutrino oscillation in appearance and disappearance channels by the T2K experiment with 6.6×10^{20} protons on target, Phys.Rev. D91 (2015) 072010.
- The T2K Collaboration (K. Abe et al.), Measurement of the ν_μ CCQE Cross-Section on Carbon with the ND280 Detector at T2K, Phys.Rev. D92 (2015) 112003.
- The T2K Collaboration (K. Abe et al.), Search for Short Baseline ν_e Disappearance with the T2K Near Detector, Phys.Rev. D91 (2015) 051102.
- The T2K Collaboration (K. Abe et al.), Neutrino Oscillation Physics Potential of the T2K Experiment, PTEP 2015 (2015) 043C01.
- The T2K Collaboration (K. Abe et al.), Measurement of the Inclusive Electron Neutrino Charged Current Cross Section on Carbon with the T2K Near Detector, Phys.Rev.Lett. 113 (2014) 241803.
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