

I certify that I carried out some of the research leading to the following publications whilst I was a member of staff at the *Department of Nuclear Physics*, Australian National University.

- E. Mendoza, D.Cano-Ott, C.Guerrero, E.Berthoumieux, The n_TOF Collaboration, "Pulse pile-up and dead time corrections for digitized signals from a BaF_2 calorimeter", Nucl. Instrum. and Meth. A**768** (2014) 55-61.
- F. Belloni et al. (The n_TOF collaboration), "A Micromegas Detector for Neutron Beam Imaging at the n TOF Facility at CERN", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 365-367; http://dx.doi.org/10.1016/j.nds.2014.08.100.
- E. Chiaveri et al. (The n_TOF collaboration), "The CERN n TOF Facility: Neutron Beams Performances for Cross Section Measurements", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets 119 (2014) 1-4; http://dx.doi.org/10.1016/j.nds.2014.08.003
- C. Guerrero et al. (The n_TOF collaboration), "Investigation of Neutron-induced Reactions at n TOF: an Overview of the 2009-2012 Experimental Program", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 5-9; http://dx.doi.org/10.1016/j.nds.2014.08.004.
- J. Balibrea, E. Mendoza, D. Cano-Ott, C. Guerrero et al. (The n_TOF collaboration), "Measurement of the Neutron Capture Cross Section of the Fissile Isotope ²³⁵U with the CERN n TOF Total Absorption Calorimeter and a Fission Tagging Based on Micromegas Detectors", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 10-13; http://dx.doi.org/10.1016/j.nds.2014.08.005
- F. Mingrone et al. (The n_TOF collaboration), "Measurement of the ²³⁸U Radiative Capture Cross Section with C_6D_6 at the CERN n TOF Facility", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 18-21; http://dx.doi.org/10.1016/j.nds.2014.08.007
- T. Wright et al. (The n_TOF collaboration), "High-precision Measurement of the ²³⁸U(n,y) Cross Section with the Total Absorption Calorimeter (TAC) at n TOF, CERN", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 26-30; http://dx.doi.org/10.1016/j.nds.2014.08.009.
- D. Tarrio et al. (The n_TOF collaboration), "Fission Fragment Angular Distribution of ²³²Th(n,f) at the CERN n TOF Facility", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 35-37; http://dx.doi.org/10.1016/j.nds.2014.08.011



- M. Barbagallo et al. (The n_TOF collaboration), "Capture Cross Section of ²³⁶U: the n TOF Results", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 45-47; http://dx.doi.org/10.1016/j.nds.2014.08.014
- A. Tsinganis et al. (The n_TOF collaboration), "Measurement of the ²⁴²Pu(n,f) Cross Section at the CERN n TOF Facility", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 58-60; http://dx.doi.org/10.1016/j.nds.2014.08.018.
- E. Mendoza et al. (The n_TOF collaboration), "Measurement of the ²⁴¹Am and the ²⁴³Am Neutron Capture Cross Sections at the n TOF Facility at CERN", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 65-68; http://dx.doi.org/10.1016/j.nds.2014.08.020.
- K. Fraval et al. (The n_TOF collaboration), "Measurement and Analysis of 241 Am(n,2) Cross Sections with C_6D_6 Detectors at the n TOF Facility at CERN", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 72-75; http://dx.doi.org/10.1016/j.nds.2014.08.022.
- C. Massimi et al. (The n_TOF collaboration), "New Measurement of the ²⁵Mg(n,22) Reaction Cross Section", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 110-112; http://dx.doi.org/10.1016/j.nds.2014.08.031.
- G. Giubrone et al. (The n_TOF collaboration), "Measurement of the ^{54,57}Fe(n, 22) Cross Section in the Resolved Resonance Region at CERN n TOF", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets **119** (2014) 117-120; http://dx.doi.org/10.1016/j.nds.2014.08.033.
- F. Gunsing et al. (The n_TOF collaboration), "Spin Measurements of n+87 Sr for Level Density Studies", Proceedings of the Nuclear Data Conference 2013, New York, 4-8 March 2013, Nuclear Data Sheets 119 (2014) 132-136; http://dx.doi.org/10.1016/j.nds.2014.08.037.
- C. Weiss et al. (The n_TOF collaboration), "The (n,α) reaction in the s-process branching point ⁵⁹Ni", Proceedings of the Nuclear Data Conference 2013, Nuclear Data Sheets **120** (2014) 208.
- C. Lederer et al. (The n_TOF collaboration), "Neutron capture reactions on Fe and Ni isotopes for the astrophysical s-process", Proceedings of the Nuclear Data Conference 2013, Nuclear Data Sheets **120** (2014) 201.
- P. Zugec, N. Colonna, D. Bosnar et al. (The n_TOF collaboration), "GEANT4 simulation of the neutron background of the C_6D_6 set-up for capture studies at n TOF", Nucl. Instr. and Meth. A **760** (2014) 57.
- K. Fraval, F. Gunsing et al. (The n_TOF collaboration), "Measurement and analysis of the 241 Am(n, \mathbb{Z}) cross section with liquid scintillator detectors using time-of-flight spectroscopy at the n_TOF facility at CERN", Phys. Rev. C89 (2014) 044609.
- F. Mingrone et al. (The n_TOF collaboration), " $^{238}U(n,\gamma)$ reaction cross section measurement with C_6D_6 detectors at the n_TOF CERN facility", EPJ Web of Conferences **66** (2014) 030601.



C. Massimi et al. (The n_TOF collaboration), "The nucleosynthesis of heavy elements in Stars: the key isotope 25Mg", EPJ Web of Conferences **66** (2014) 07016.

M. Barbagallo et al. (The n_TOF collaboration), "Measurements of neutron cross sections for advanced nuclear energy systems at n_TOF (CERN)", EPJ Web of Conferences **66** (2014) 10001.

D. Tarrío et al. (The n_TOF collaboration), "Measurement of the angular distribution of fission fragments using a PPAC assembly at CERN n TOF", Nucl. Instr. and Meth. A743 (2014) 79; (http://dx.doi.org/10.1016/j.nima.2013.12.056)

P. Zugec et al. (The n_TOF collaboration), "Experimental neutron capture data of 58 Ni from the CERN n_TOF facility", Phys. Rev. C89 (2014) 014605.

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