David F. Measday fonds

Compiled by Jennifer Vanderfluit (2016)



University of British Columbia Archives







Table of Contents

• Fonds Description

- Title / Dates of Creation / Physical Description
- o Biographical Sketch
- o Scope and Content
- o Notes

• Series Descriptions

- Oxford series
 - Academic papers sub-series
 - Correspondence sub-series
 - General sub-series
- o Harvard series
 - Academic papers sub-series
 - Correspondence sub-series
 - General sub-series
- CERN series
 - Academic papers sub-series
 - Correspondence sub-series

• UBC/TRIUMF series

- Academic papers sub-series
- Teaching and lectures subs-series
- Administrative sub-series
- Correspondence sub-series
- General sub-series

• General scholarship series

- Reports sub-series
- Intermediate Energy Nuclear Physics sub-series
- File List
- Catalogue entry

Fonds Description

David Measday fonds. – 1959-2014. 1.63 m textual records and other materials.

Biographical Sketch

Dr. David Frederick Measday was born in London, England in 1937. He studied at King's College School, Wimbledon before attending Wadham College, Oxford. There he earned bachelors (1959) and doctorate (1962) degrees in physics. From 1962 to 1965 Dr. Measday was a post-doctoral fellow at Harvard University in Boston. He then went on to work at CERN, the European Organization for Nuclear Research in Geneva, Switzerland from 1965-1970. In 1970 he joined what was then the Department of Physics (later to become the Department of Physics & Astronomy) at the University of British Columbia with a particular interest in working with the university's new particle accelerator TRIUMF. From 1970 to 1975 he taught as an associate professor, earning the rank of full professor in 1975. He was awarded UBC's Senior Killam Fellowship which enabled his 1977/1978 sabbatical studies at CERN and the CEA Centre at Saclay, France. In 1990 he became Associate Dean of Science and in 1998 was Dean *pro tem*. In this capacity, Dr. Measday aided with the reorganization of the Departments within the Faculty of Science included the shift to computer centered laboratories.

Scope and Content

Fonds consists of materials related to the career of David Measday from his time as a graduate student at Oxford to his post-retirement work at UBC. Primarily, the fonds includes material regarding his research, academic writings, and administrative duties at the University of British Columbia. Additionally, there are reports arising from various international, governmental, and non-governmental organizations with which Measday had some association. Administrative records include materials for the development of TRIUMF. There is also a small amount of teaching material from lectures and physics courses taught by Measday. Material is organized into series based on intuitional association, the majority of which is from Measday's time working at UBC and with TRIUMF.

Notes

Researchers are strongly advised to check with the University Archives regarding permission to publish or otherwise use materials from this fonds.

File list available.

Fonds also includes 11 schematic drawings, 9 photographs, and 1 book.

Biographical note adapted from Department of Physics & Astronomy's website and supplemented with information from the fonds.

Most material donated by the family of David Measday and collected from the Department of Physics and Astronomy.

Material on Davidson Arboretum in Box 5 received from David Brownstein.

Series Descriptions

Oxford series. - 1959-1965, 2002.

~1 cm textual records.

Materials from Measday's time as a graduate student at Oxford. Includes reprints of articles from his research, correspondence, and general materials related to the school.

Box 1 [1-1/3]

Academic papers sub-series. – 1963-1965. 0.5 cm textual records.

Three reprints of academic papers published in Nuclear Physics from Measday's time as a graduate student at Oxford.

Box 1 [1-1].

Correspondence sub-series. – 1959-1962. ~0.2 cm textual records.

One file of letters primarily concerning Measday's time at Oxford.

Box 1 [1-2].

General sub-series. – 2002. ~0.2 cm textual records.

Report on the history of physics at Oxford.

Box 1 [1-3].

Harvard series. – 1959-1970, 1999. 6.5 cm textual records.

Materials from Measday's time as a post-doctoral fellow at Harvard. Includes reports, reprints of articles, correspondence, and general archives related to Harvard and his time there.

Box 1 [1-4/18]

Academic papers sub-series. – 1963-1970. 4.3 cm textual records. Reports on Harvard's Lyman Cyclotron Laboratory (1-4/14) and reprints (1-14). of articles authored and co-authored by Measday. Material is organized into sections of reports and reprints.

Box 1 [1-4/14].

Correspondence sub-series. – 1962-1968, 1999. 0.2 cm textual records

One file of letters primarily concerning Measday's time at Harvard.

Box 1 [1-15].

General sub-series. – 1959-1967. 2 cm textual records.

Materials concerning the physics program and courses offered (taught by Measday?) at Harvard. Includes information for foreign scholars from the US Treasury Department collected by Measday.

Box 1 [1-16/18].

CERN series. – 1965-1972. 5.5 cm textual records.

Materials from Measday's time as a research scientist at CERN, the European Organization for Nuclear Research in Geneva, Switzerland. Includes reports, reprints of papers, and correspondence.

Box 1 [1-19/22].

Academic papers sub-series. – 1965-1972. 2.5 cm textual records.

Papers and reports authored and co-authored by Measday from his time working at CERN. Material is organized into sections of reports (1-19/20) and reprints (1-21).

Box 1 [1-19/22].

Correspondence sub-series. – 1968-1970. 3 cm textual records. One file with copies of Measday's outgoing correspondence from his time at CERN.

Box 1 [1-1/22].

UBC/TRIUMF series. – 1968-2014. 1.165 m textual records;

6 photographs.

Materials from Measday's time as a physics professor, department head, and faculty member at the University of British Columbia. Includes academic papers, reports, conference presentations, teaching materials, and correspondence. Also included are research and administrative materials related to Measday's various roles at UBC, both during his tenure, and after his retirement.

Boxes 2;3;4;5;6[6-1/9].

Academic papers sub-series. – 1970 -2007. 59.5 cm textual records.

Papers and reports authored and co-authored by Measday from his time working at UBC and TRIUMF. Sub-series is organized into sections of reports (2-1/2), conferences (2-3/15), drafts & notes (2-16/20, 3-1/8, 4-1/29), and reprints (box 4-30/45). Drafts and notes section includes correspondence related to the production of the papers.

Boxes 2 ; 3 ; 4 [4-1/45].

Teaching and lectures sub-series. – 1969-[200-?]. 5cm textual records.

Lecture overheads, notes and course handouts for physics courses and general physics lectures.

Box 4 [4-46/51].

Administrative subseries. – 1970-2014. 15 cm textual records; 11 schematic drawings; 5 photographs. (Polaroid, colour)

Materials related to Measday's administrative duties as member of the Department of Physics, as Associate Dean of Science, as head of TRIUMF, and as a member of the Professors Emeriti, and the President's Advisory Committee on Campus Enhancement (with recommendations for UBC's Davidson Arboretum). Includes correspondence, reports, meeting agendas, proposals, catalogues and schematics related to TRIUMF's TINA project.

Box 5 [5-1/17]

Correspondence sub-series. – 1970-2014. 23 cm textual records.

General correspondence organized by date from Measday's time at UBC. Includes some letters related to his appointment to UBC while he was on staff at CERN and letters from a sabbatical leave spent partially at CERN.

Box 5 [5-18/34]

General sub-series. – 1968-2013. 14 cm textual records; 1 photograph (20cm x 25cm, b&w)

General archives related to Measday's achievements, position, the physics program, and achievements of colleagues as identified by Measday. Includes press clippings, correspondence, certificates, a photograph, and ephemera.

Box 6 [6-1/9].

General scholarship series. - 1964-1997.

33.5 cm textual records;3 photographs.

Materials related to Measday's general scholarship in particle physics. Series is organized into two sub-series: one containing reports from various inter-national, governmental and non-governmental agencies, and another relating to the publication and writing of Intermediate Energy Nuclear Physics (1970), co-authored with W.O. Lock and published by Methuen & Co.

Boxes 6 [6-10/44]; 7.

Reports cub-series. – 1964-1967 10.5 cm textual records.

Published and un-published reports for various committees, several of which Measday was a member.

Box 6 [6-10/28]

Intermediate Energy Nuclear Physics sub-series. – [c.1968]-1980. 23 cm textual records (includes 1 book); 3 photographs.

Drafts, manuscripts, and correspondence regarding publication of a physics text by Measday and W.O. Lock.

Boxes 6 [6-29/44] ; 7.

File List

BOX 1

OXFORD SERIES

Academic papers sub-series

- 1-1 Reprints Oxford thesis papers. 1963-1965.
 - a) "The ¹²C(p,p')¹²C* (12.71 and 15.11 MeV) reaction" Measday. *Nuclear physics* 45. (1963) 98-112.
 - b) "The ¹²(p, γ) reaction from 10 to 50 MeV" Measday et al. *Nuclear physics* 45. (1963) 113-122.
 - c) "The electric dipole resonance of ¹³C and ¹³N" Measday, Clegg & Fischer. *Nuclear physics* 61. (1965) 269-281.

Correspondence sub-series

- 1-2 The archives D. Phil letters. Correspondence primarily from Oxford University regarding Measday's doctoral studies. 1959-1962.
 General sub-series
- 1-3 "History of physics in the University of Oxford". 2002.

HARVARD SERIES

Academic papers sub-series

Reports

- 1-4 Cyclotron laboratory Harvard University annual progress report 1 June 1962 31 May 1963.
- 1-5 Cyclotron laboratory Harvard University annual progress report 1 June 1963 31 May 1964.
- 1-6 Cyclotron laboratory Harvard University annual progress report 1 June 1964 31 May 1965.
- 1-7 Cyclotron laboratory Harvard University annual progress report 1 June 1966 31 May 1967.
- 1-8 Cyclotron laboratory Harvard University annual progress report 1 June 1967- 31 May 1968.

- 1-9 Cyclotron laboratory Harvard University annual progress report 1 June 1968- 31 May 1969.
- 1-10 Lyman laboratory Harvard University quarterly progress report 1 June 1969 31 August 1969.
- 1-11 Lyman laboratory Harvard University quarterly progress report 1 September 1969 30 November 1969.
- 1-12 Lyman laboratory Harvard University quarterly progress report 1 December 1969 28 February 1970.
- 1-13 Lyman laboratory Harvard University final report 1966 1970.

Reprints

- 1-14 Reprints Harvard. 1965-1967.
 - a. "Neutron total cross sections for neutrons, protons, and deuterons in the energy range of 90 to 150 MeV" Measday & Palmieri. *Nuclear physics* 85. (1965) 142-152.
 - b. "Neutron-proton differential cross section at 129 and 150 MeV" Measday. *The physical review* 142 v3 (1966) 584-590.
 - c. "Neutron total cross sections in the energy range of 80 ti 150 MeV" Measday & Palmieri. *Nuclear physics* 85 (1965) 129-141.
 - d. "Monokenetic neutron beam in the range of 50 to 150 MeV" Measday. *Nuclear instruments & methods* 40. (1965). 213-220).
 - e. "Radiation damage of Mylar and H-film" Koehler, Measday & Morrill. *Nuclear instruments & methods* 36. (1965) 1263-1264.
 - f. "Loss of charged particles by nuclear interactions in Scintillators" Measday. *Nuclear instruments & methods* 34 (1965) 353-355.
 - g. "Processes for obtaining conducting areas on thin films: application ionization chambers" Measday. *The review of scientific instruments* 33 (1965) 341-342.
 - h. "Loss of protons by nuclear interactions in sodium iodine crystals" Measday. *Nuclear instruments & methods* 42 (1966) 26-28.
 - i. "A study of the (n, d) reaction at 152 MeV" Measday. *Physics Letters* 21 n1 (1966) 62-63.
 - j. "The H² (n, p)2n reaction at 152 MeV" Measday. *Physics letters* 21 n1 (1966) 66-68.
 - k. "The ¹²C(p, pn)¹¹C reaction from 50 to 160 MeV" Measday. *Nuclear physics* 78 (1966) 476-480.
 - 1. "(*n*, *p*) and (*n*, *d*) reactions at 152 MeV" Measday & Palmieri. *The physical review* 161 n4 (1967) 1071-1079.

m. "Unbound energy levels in ⁴H" Measday & Palmieri. *Physics letters* 25B n2 (1967) 106-108.

Correspondence sub-series

1-15 The archives - [Harvard]. – Primarily correspondence regarding Measday's work at Harvard. 1962-1968, 1999.

General sub-series

- 1-16 Decade in Review Report of the President Harvard University 1953/1963. 1963.
- 1-17 Physics courses. Reading lists for various Harvard? Physics courses taught between 1960 and 1965.
- 1-18 [US income tax information for foreign scholars]. Government documents from the US Treasury Department International Revenue Service 1959-1967.

CERN SERIES

Academic papers sub-series

Reports

- 1-19 Reports CERN. 1965-1972.
 - a. "Short report on π production" Measday. 1965.
 - b. "Production of polarized neutron beams" Folkman & Measday. 1968.
 - c. "A survey of possible experiments on the 200 MeV Indiana Cyclotron" Measday. 1968.
 - d. "A study of the reaction $(\pi^+ + d \rightarrow p + p)$ for pion energies between 142 and 262 MeV" Richard-Serre et al. (w/ Measday) 1969-1970.
 - e. "Proton total cross-sections on ¹H, ²D, ¹²C, and ¹⁶O in the energy range 180 to 560 MeV" Schwaller et al. (w/ Measday) 1972.
- 1-20 Effect of a vacuum window on the 125 MeV beam" Measday, Skarek, & Williams February 1970.

Reprints

1-21 Reprints – CERN. – 1968-1972.

- a. "The loss of protons by nuclear inelastic interactions in various materials" Measday & Richard-Serre. *Nuclear instruments & methods* 76 (1969) 45-54. (includes draft).
- b. "A study of the reaction π⁺d→pp for pion energies between 142 and 262 MeV" Measday et al. *Nuclear physics B* 20 (1970) 413-440.
- c. "Proton-proton total cross-sections between 179 and 555 MeV" Measday et al. *Physics letters* 35 *B* n3 (1971) 243-246.
- d. "Reaction cross-sections for protons in the energy range 220-570MeV" Measday et al. *Nuclear physics A* 183 (1972) 81-104.
- e. "Loss of protons in thin absorbers" Measday et al. *Nuclear instruments & methods* 104 (1972) 157-162.

Correspondence sub-series

1-22 [Outgoing correspondence CERN]. – Includes copies of some reports referenced in correspondence. 1968-1970.

BOX 2

UBC/TRIUMF SERIES

Academic papers sub-series

Reports

- 2-1 "A comparative test of the models of atomic capture of negative particles using
 321 experimental coulomb-capture ratios" Dezsö Horváth. 1983.
- 2-2 "The KAON factory a bigger TRIUMF for Canada". Report, Measday, ng, & Craddock. 1986.

Conference papers

- 2-3 "The nucleon-nucleon interaction" 7th International Conference on High Energy Physics and Nuclear Structure. Measday (1978) 61-68.
- 2-4 Steamboat Springs contributions May 1984 / Spin physics in perspective. 1984.
- 2-5 "The TRIUMF proposal for a kaon factory" conference proceedings. Measday *Nuclear and particle physics at intermediate energies with hadrons* eds: Bressani & Pauli. 1986.

- 2-6 PP π° at Dubna / pion production in nucleon nucleon collision below 600 MeV. – 1987.
- 2-7 π⁻p at Bejing 1987. "Pion-nucleon interaction at low energies" Measday et al *Proceedings of International Symposium on Medium Energy Physics* (1987) 277-299.
- 2-8 Proceedings of the Sixth LAMPF Users Meeting. Conference proceedings. 1972.
- 2-9 IUCF Threshold talk. Correspondence, drafts. 1990.
- 2-10 Speaker instructions. Conference information and agendas regarding ICOHEPANS. 1979.
- 2-11 Parallel selections. Correspondence regarding the 8th International Conference on High Energy Physics & Nuclear Structure (ICHOHEPANS). 1979.
- 2-12 Special sessions. Correspondence regarding the 8th International Conference on High Energy Physics & Nuclear Structure (ICHOHEPANS). 1979.
- 2-13 VI Latin American Symposium on Nuclear Physics and Applications. 2005.
- 2-14 VII Latin American Symposium on Nuclear Physics and Applications. Includes "Gamma rays from muon capture in Al, Si, natural Ca, Fe, I, Au, and Bi." – 2005.
- 2-15 Proceedings of the third international symposium pion-pion and nucleonnucleon physics – Leningrad, 1989. – Includes personal note to Measday from Dezsö Horváth. 1989-1990.

Drafts & notes

- 2-16 Pion chemistry TRIUMF exp 511. research proposal and results. n.d.
- 2-17 Pion chemistry [correspondence 1985]. Correspondence and notes. 1985.
- 2-18 Pion chemistry [correspondence 1987]. Correspondence and notes. 1987.
- 2-19 [Pion hydrogen paper / TRIUMF experiment 511]. Correspondence, research proposal. n.d.
- 2-20 π hydrogen paper. Correspondence, notes. 1990-1991.

BOX 3

- 3-1 Atomic capture. Articles and notes. 1980-1996.
- 3-2 Physics today pion factories. Correspondence and articles regarding "Physics at the pion factories" Physics today. 1984-1988, 2006.
- 3-3 Erice exotic atoms 1989. 1989-1990.
- 3-4 Tony Noble PhD $| \Lambda \rightarrow n + \gamma$. Notes, papers and draft. 1990-1991.
- 3-5 Gamma rays from muon capture in ²⁷Al and natural Si. Article, correspondence, drafts. 1997-2007.
- 3-6 [Muon & gamma ray articles annotated]. Articles not by Measday, annotated by Measday. [c. 2007].
- 3-7 Miller file. Correspondence. 2007.

3-8 Gamma rays from muon capture in I, Au, and Bi. – Notes, article, correspondence. 2007.

BOX 4

- 4-1 Gamma rays from muon capture in natural Ca, Fe, and Ni. 2006-2007.
- 4-2 Muon capture in Sc, V, Mn, Co. Overhead transparencies and grant proposal. 2001.
- 4-3 μ^2 in ²⁸Si. Papers, correspondence. 1983-1997.
- 4-4 Muon capture in Silicon 28 / Belal Moftah. Papers, correspondence. 1994-1997.
- 4-5 Exp. 41 A(π^2 , γ) [radiative pion capture]. Papers. 1973-1980.
- 4-6 ${}^{15}N(\pi^+, \gamma)$. Papers. 1985.
- 4-7 TINA experiments. Correspondence, notes, research proposals. 1974-1984.
 - a. Proposal to study $p + p \rightarrow \pi^{\circ} + p + p$.
 - b. $\mu^+ \rightarrow e^+ + \upsilon_e + \ddot{\upsilon}_{\mu}$.
 - c. TRIUMF proposal $\mu^+ \rightarrow e^+ + \gamma$.
- 4-8 π^+ +*d*→p+p. [nucleon nucleon interaction]. Correspondence, research proposals, papers. 1976-1978.
- 4-9 TRIUMF, Twelve years hence: evolution not revolution a personal commentary on the options by D.F. Measday, Dec. 1977.
- 4-10 TRIUMF proposal π° lifetime. 1978.
- 4-11 $\mu^+ \rightarrow e^+ \ddot{\upsilon}_{\mu} \upsilon_e$ and $\mu^+ \rightarrow e^+ \ddot{\upsilon}_{\mu} \upsilon_e \gamma$. Notes. [197-?].
- 4-12 $\mu^{-} + d^{-} \rightarrow n + n + v + \text{muon induced FUSION.} \text{Notes.} [197-?].$
- 4-13 TRIUMF thought $p^+d \rightarrow n+n+\gamma$. Notes. [197-?].
- 4-14 ²⁸Si(μ-,υ)²⁸ Al*(T=2). Notes, papers. [197-?].
- 4-15 $\mu \rightarrow evv \mid \epsilon$. Research proposal, correspondence. 1980-1981.
- 4-16 TRIUMPH proposal $\pi^+ \rightarrow e^+ + \upsilon + \gamma$ and $\pi^+ \rightarrow e^+ + \upsilon$ [decay modes of pions]. Notes, research proposal, correspondence. 1972-1985.
- 4-17 $\pi d \rightarrow \gamma NN \& \pi^{\circ} NN.$ Correspondence and notes. 1970-1981.
- 4-18 Neutrino mass & $\pi \rightarrow \mu \upsilon \gamma$. Research proposal, correspondence, notes. 1975-1984.
- 4-19 JER [*Journal of Environmental Radioactivity*] version of ['A simple model for describing the concentration of] ²¹²Pb [in the atmosphere']. July 2003. Article, correspondence, data.
- 4-20 [*Health physics* version of 'A simple model for describing the concentration of] ²¹²Pb [in the atmosphere']. – Article, correspondence, data. 1999-2002.
- 4-21 Anthropogenic GARDS [Global Atmospheric Radionuclide Detection System] Final version. – Articles, correspondence. 1998-2000.
- 4-22 GARDS paper. Memos. 2000-2001.
- 4-23 Muon review. Correspondence, notes. 2000-2001.
- 4-24 Figures for muon capture review. 2000.

- 4-25 Neutrons in HPGe. Notes, papers. [199-?].
- 4-26 Neutrons in HPGe. [correspondence]. 1993-2004.
- 4-27 Muna's paper. correspondence. 1992.
- 4-28 'The hyperfine transition in light muonic atoms of odd Z'. Correspondence, papers. 2000.
- 4-29 μ^{14} N capture. Correspondence, notes. 2001.

Reprints

- 4-30 Panofsky ratio. "A remeasurement [sic] of the Panofsky ratio" Spuller et al (w/ Measday) *Physics letters* (1977) 67B n 4 479-482.
- 4-31 π d \rightarrow π° at rest. "Charge exchange of stopped π in deuterium: experiment and theory" MacDonald et al (w/ Measday) *Physical review letters* 38 n14 (1977) 746-749.
- 4-32 $\mu \rightarrow e \gamma$. P.R.L. <u>39</u> 1113 (1977). "New limit on the decay $\mu^+ \rightarrow e \gamma$ " Depommier et al. (w/ Measday) *Physical review letters* 39 n18 (1977) 1113-1116.
- 4-33 π cx at rest. "The observation of charge exchange of pions captured in several nuclei" Bassalleck et al (w. Measday) submitted to *Nuclear physics A* June 1980.
- 4-34 ¹²C(π , 2 γ) Mazzucato et al. "Energy distribution of photons in the ¹²C(π , 2 γ) reaction" Mazzucato et al. *Physics letters* 96B n 1,2 (1980) 43-46.
- 4-35 "Mesic molecular effects in the capture of negative pions stopped in gaseous hydrogen isotopes" Aniol et al. (w/ Measday) *Physical review* A 28 n5 (1983) 2684-2692.
- 4-36 A(π , π°) at rest. B Bassalleck et al. "The observation of charge exchange of pions captured in several nuclei" Bassalleck et al. (w/ Measday) *Nuclear physics* A362 (1981) 445-460.
- 4-37 Pion Chemistry | NIM A242 465 (86). "Gamma-ray coincidence measurements for studies of pion chemistry" Smith et al. (w/ Measday) *Nuclear instruments and methods in physics research* A242 (1986) 465-469.
- 4-38 Panofsky in ³He. "The Panofsky ratio in ³He" Corriewau et al. (w/ Measday) *Nuclear physics* A473 (1987) 747-756.
- 4-39 Suzuki Total μ⁻ capture / Total nuclear capture rates for negative muons. 1987.
- 4-40 "Muon catalyzed fusion in HD and H₂ + D₂ gaseous mixtures" | Leningrad. Aniol et al (w/ Measday) *Muon catalyzed fusion* 2 (1988) 63-72.
- 4-41 π in H₂ + D₂ + Kravsov. "Pion transfer from hydrogen to deuterium in H₂ + D₂ gas mixtures" Weber et al. (w/ Measday) *Physical review A* 41 n1 (1990) 1-10. ;
 "Quasiresonance pion transfer in the protium-deuterium mixture" Kravtsov et al *Muon catalyzed fusion* 2 (1988) 199-206.

- 4-42 Reprints UBC/TRIUMPH 1970s. [1971] 1978.
 - a. "Experiments at meson factories" Measday. *Intermediate energy physics*. [1971?] 540-560.
 - b. "Destructive interference in radiative proton capture reactions" Hasinoff, Johnson, & Measday. *Physics letters* 39B n4 (1972). 506-508.
 - c. "The experimental programme at TRIUMF" Measday. 5th International Conference on High Energy Physics and Nuclear Structure. [1973] 423-426.
 - d. "High energy levels in ¹³N" Canadian journal of physics 51 (1973) 1227-1237.
 - e. "A new NaI gamma-ray spectrometer" *Nuclear instruments & methods* 117 (1974) 375-379. (with draft).
 - f. "A new limit on the decay $\mu^+ \rightarrow e^+ + \gamma + \gamma''$ Measday et al. *Nuclear physics* (1974) 221-229.
 - g. "Isospin violation in alpha induced reations" Spuller et al. (w/ Measday) *Nuclear physics* A248 (1975) 276-290. (with draft).
 - h. "s-wave production of pions in $p + p \rightarrow \pi^+ + d''$ Spuller & Measday *Physical review D* 12 n11 (1975) 3550-3555.
 - i. "High-energy levels in ¹²N (II)" Berghofer et al. (w/ Measday) *Nuclear physics* A263 (1976) 109-130.
 - j. "The charge of stopped π in deuterium: experiment and theory" MacDonald et al. (w/ Measday) *Physical review letters* 38 n14 (1977) 749-749.
 - k. "New limit on decay $\mu^+ \rightarrow e^+\gamma$ " Depommier et al. (w/ Measday) *Physical review letters* 39 n18 (1977) 1113-1116.
 - "Proton total cross sections on ¹H, ²H, ⁴He, ⁹Be, C, and O in the energy range 180 to 500 MeV" Schwaller et al. (w/ Measday) *Nuclear physics* A316 (1979) 317-344.
 - m. "Hopes and realities for the (p, π) reaction" Measday & Miller *American Review of Nuclear Particle Science* 29 (1979) 121-160 9with draft)
- 4-43 Reprints UBC/TRIUMF 1980s. 1980-1989.
 - a. "Muon capture in oxides using the lifetime method" Suziki et al. (w/ Measday) *Physics letters* 95B n2 (1980) 202-205. (with 1981 letter)
 - b. "The observation of charge exchange of pions captured in several nuclei" Bassalleck et al. (w/ Measday) *Nuclear physics* A362 (1981) 445-462 (with 1980 draft)
 - c. "A novel measurement of the muon capture rate in liquid hydrogen by the lifetime technique" Bardin et al. (w/ Measday) *Nuclear physics* A352 (1981) 365-378 (with 1980 draft).
 - d. "Branching ratios for stopped pions in deuterium" Highland et al. (w/ Measday) *Nuclear physics* A365 (1981) 333-348.

- e. "Mesic molecular effects in the capture of negative pions stopped in gaseous hydrogen isotopes" Aniol et al. (w/ Measday) *Physics review* A28 (1983) 2684-2692.
- f. "Radiative capture and charge exchange of negative pions on protons at 26.4 and 39.3 MeV" Solomon, Measday & Poutissou *Nuclear physics* A414 (1984) 493-507.
- g. "A study in the reaction ²⁸Si(p, γ)²⁹P" Lim et al. (w/ Measday) *Nuclear physics* A449 (1986) 301-330.
- h. "Atomic capture ratios for muons in oxides" Stanislaus et al. (w/ Measday) *Nuclear physics* A475 (1987) 630-641.
- i. "Atomic capture of muons and density" Stanislaus, Entezami & Measday Nuclear physics A475 (1987) 642-656.
- j. "Reaction $\pi p \rightarrow \pi^{\circ} n$ below the Δ resonance" Bagheri et al. (w/ Measday) *Physical review C* 38 n2 (1988) 885-894
- k. "Search for the spontaneous emission of pions" Stanislaus (w/ Measday) *Physical review C* 39 n1 (1989) 295-297.
- 1. "Search for *T*=2 dibaryons via π 'd $\rightarrow \gamma X$ " Stanislaus et al. (w/ Measday) *Physics letters B* 219 n2,3 (1989) 237-239.
- m. "Radiative hyperon processes" Roberts et al. (w/ Measday) *Il nuovo cimento* 102 (1989) 145-166.
- n. "Radiative kaon capture at rest in hydrogen" Whitehouse et al (w/ Measday) *Physical review letters* 63 n13 (1989) 1352-1355.
- o. "A measurement of the branching ratio for the $\Sigma^{+} \rightarrow p\gamma$ decay" Hessey et al (w/ Measday) *Particles and Fields* 42 (1989) 175-183.
- 4-44 Reprints UBC/TRIUMF 1990s. 1990-1998.
 - a. "The formation and reactions of pionic hydrogen atoms" Measday *Electromagnetic cascade and chemistry of exotic atoms* ed:Simons et al. Plenum Press, New York. 1990.
 - b. Transfer of π from hydrogen to deuterium in H₂0 + D₂0 mixtures" Stanislaus et al. (w/ Measday) *Physics letters A* 143 n4,5 (1990) 239-243.
 - c. "Transfer mechanisms for pionic hydrogen in organic liquids" Harston et al. (w/ Measday) *Physical review letters* 64 n16 (1990) 1887-1890.
 - d. "*s*-wave partial cross sections for the reaction $p + p \rightarrow p + p + \pi^{\circ \prime \prime}$ Stanislaus et al. (w/ Measday) *Physical review* C 41 n5 (1990) R1913-R1916.
 - e. "Experimental study of pion capture by hydrogen bound in molecules" Horváth et al. (w/ Measday) *Physical review A* 41 n11 (1990) 5834-5843.
 - f. "Radiative kaon capture on deuterium and the Λn scattering lengths" Gall et al. (w/ Measday) *Physical review C* 42 n2 (1990) R475-R478.
 - g. "Capture and transfer of stopped pions in alcohols" Harston et al. (w/ Measday) *Physical review A* 44 n1 (1991) 103-110.

- h. "Pion capture and hydrogen bonds in deuterated methanol" Horváth et al. (w/ Measday) *Physical review A* 44 n3 1725-1732.
- i. "Weak radiative hyperon decays" Bassalleck invited talk at Workshop on Hyperon and Hypernuclear Physics with Proton Beams. 1991.
- j. "Total cross sections and analyzing powers for the reaction $p + p \rightarrow p + p + \pi^{\circ}$ near threshold" Stanislaus et al. (w/ Measday) *Physical review* C 44 n6 (1991) 2287-2302.
- k. Measurement of the $\Lambda \rightarrow n + \gamma$ branching ratio" Noble et al. (w/ Measday) *Physical review letters* 69 n3 (1992) 414-417. [plus manuscript]
- 1. "Study of the hypernuclei via the (K⁻, π^o) reaction" Measday *Czechoslovak journal of physics* 42 (1992) 1231-1237.
- m. "Weak radiative decay $\Lambda \rightarrow n \gamma$ and the radiative capture reaction $K^{-}p \rightarrow \Sigma(1385)\gamma$ " Larson et al. (w/ Measday) *Physical review D* 47 n3 (1993) 799-810.
- n. "Measurement of hyperfine transition rates in μ⁻F, Na, Al, P, and Cl, and the hyperfine dependence of μ⁻ capture" Gorringe et al. (w/ Measday) *Nuclear instruments and methods in physics research B* 79 303-305.
- o. "Measurement of hyperfine transition rates in muonic ¹⁹F, ²³N, and ^{nat}Cl" Gorringe et al. (w/ Measday) *Physics letters B* 309 (1993) 241-245.
- p. "Radiative decay of the Δ resonance: analyzing powers for $p^- p \rightarrow \gamma n''$ Staško et al. (w/ Measday) *Physical review letters* 72 n7 (1994) 973-976.
- q. "Hyperfine effect in μ^2 capture on ²³Na and g_p/g_a " Measday et al. *Physical review letters* 72 (1994) 3472-3475.
- r. "Observables in muon capture on 23Na and the effective weak couplings g_a and g_p " Measday et al. *Physical review* C 54 (1996) 2714-2731.
- s. "Muon capture by silicon 28" *Hyperfine interactions* 103 (1996) Measday et al. 169-174.
- t. "Neutron-induced peaks in Ge detectors from evaporation neutrons" *Nuclear instruments & methods in physics research* A (1996) 212-219.
- u. "Dependence on neutron energy induced peaks in Ge detectors" Measday et al. *International Conference: Neutrons in Research and Industry* (1997) 615-618.
- v. "Muon capture in 28Si and g_p/g_a " Measday et al. *Physics Letters B* 395 (1997) 157-162.
- w. "Ultra-sensitive environmental monitoring of emissions from a radioisotope production facility" Mason, Measday, & Williams. *Pacific Basin Nuclear Conference* (1998). 385-393

- 4-45 Reprints UBC/TRIUMF 2000s. 2000-2007.
 - a. " β -delayed particle decay of °C and the A = 9, $T \frac{1}{2}$ nuclear system: experiment data, and phenomenological analysis." Gete et al. (w/ Measday) *Physical review C* 61 (2000). 21p.
 - b. "Detection of anthropogenic radionuclides by the CA002 monitoring station for the comprehensive Test Ban Treaty" Measday et al. *Health physics* 80 n2 (2001) 126-136.
 - c. "States in ⁹B from the *β*-delayed particle decay of ⁹C" Gete et al. (w/ Measday). 11p.
 - d. " β -delayed particle decay of °C and the A = 9, $T \frac{1}{2}$ nuclear system: *R*-matrix fits, the *A* = 9 nuclear system, and the stellar reaction rate of ${}^{4}\text{He}(\alpha n, \gamma){}^{9}\text{Be}{}^{"}$ Buchmann et al. (w/ Measday). *Physical review C* 63 (2001) 16p.
 - e. "Hyperfine transition in light muonic atoms of odd Z" Stocki et al (w/ Measday) *Physical review A* 64 (2001) 7p.
 - f. "Gamma rays from muon capture in ¹⁴N" Stocki et al. (w/ Measday) *Nuclear physics* 697 (2002) 55-74.
 - g. "Experience with a prototype of the Test Ban Treaty monitoring system for air-borne radioactivity" Measday & Ho *Nuclear instruments and methods in physics research B* 213 (2004)
 - h. "A simple model for describing the concentration of ²¹²Pb in the atmosphere" Ho & Measday *Journal of environmental radioactivity* 78 (2005) 289-309.
 - i. "*γ* rays from muon capture in natural Ca, Fe, and Ni" Measday & Stocki *Physical review C* 73 (2006) 17p.
 - j. "γ rays from muon capture in I, Au, and Bi" Measday, Stocki, & Tam *Physical review C* 75 (2007) 17p.
 - k. "Gamma-rays from muon capture in Al, Si, natural Ca, Fe, Ni, I, Au, and Bi" Measday and Stocki *Physical review C* 76 (2007) 17p.
 - 1. "Comparison of muon capture in light and in heavy nuclei" Measday & Stocki *VII Latin American Symposium on Nuclear Physics and Applications* (2007) 253-257.

Teaching and lectures sub-series

- 4-46 Bent crystal spectrometers. Notes, overhead transparencies, papers. [n.d.].
- 4-47 Aurora borealis. Lecture overheads and images. 2003.
- 4-48 Introduction to nuclear & particle physics. Lecture overheads. [after 1980].
- 4-49 Handouts PHYS 473. Classroom handouts, test answers, assignments and examinations for Physics 473. 2004-2005.

- 4-50 History PHYS 473. Schedule corrections. 2004.
- 4-51 Dr D. Measday 522 handouts. Articles and reports on various accelerators and an assignment regarding them. 1969-[200-?].

BOX 5

Administrative sub-series

- 5-1 CAP/APS travel acct. 1986. 1986-1988.
- 5-2 TRUIMF acct / individual operating grant 1990 -. 1999-2006.
- 5-3 [Proton range & stopping power various charts]. n.d.
- 5-4 Kinematics handbook production. 1973.
- 5-5 TRIUMF Kinematics handbook. 1973-1974.
- 5-6 Kinematics program. 1972.
- 5-7 TINA specifications. correspondence and 6 blueprint schematic drawings for TINA. 1972-1982.
- 5-8 TINA results. Correspondence, reports, and 3 schematic drawings for TINA. 1973-1976.
- 5-9 TRIUMF TINA. History of TINA, correspondence, reports and 2 blueprint schematic drawings. 1970-1973.
- 5-10 TINA recompensation [sic]. Invoices et cetera regarding TINA. Includes 18 Polaroid photographs. 1982-1984.
- 5-11 TINA correspondence. 1972-1977.
- 5-12 RCA phototubes. Catalogue with annotations. [c. 1970].
- 5-13 Philips professional tubes. Catalogue with annotations [c. 1970].
- 5-14 EMI photomultiplier tubes. Catalogues with annotations. [c. 1970].
- 5-15 [Gamma] γ-ray detector. Notes, correspondence. 1973-1974.
- 5-16 GAP [geophysics/astronomy/physics] discussion 1994. Correspondence, reports. 1993-1997.
- 5-17 President's Advisory Committee on Campus Enhancement Davidson arboretum. – Reports and background information on PACCE's recommendations for UBC's arboretum. Measday was a member of this committee. 2013-2014.

Correspondence sub-series

- 5-18 [Correspondence February June 1970]. Regarding appointment to UBC.
- 5-19 [Correspondence June 1970-March 1974].
- 5-20 [Correspondence July 1974 -1975].
- 5-21 [Correspondence 1976-1977].

- 5-22 [Correspondence 1977].
- 5-23 Leave 1977-1978. Correspondence and documentation of Measday's European leave including material on his move and Killam award. 1977-1978.
- 5-24 [Correspondence 1978].
- 5-25 [Correspondence 1983].
- 5-26 [Correspondence 1984].
- 5-27 Correspondence 85-88.
- 5-28 Correspondence 88-90.
- 5-29 Correspondence 90-94.
- 5-30 Correspondence 95-97.
- 5-31 Correspondence (misc.). Thank you letters from the Canadian government, Simon Fraser University, and the University of Otago. 1998.
- 5-32 Correspondence 98-2002.
- 5-33 Correspondence 2003 -. 2003-2014.
- 5-34 [Correspondence & articles re: Navarro-Perez, Amaro & Ruiz Arriola's: "Potential analysis of nucleon-nucleon scattering". – 2014.

BOX 6

General sub-series

- 6-1 UBC appointments. Correspondence, press clippings, certificates. 1968-[2002].
- 6-2 University C.V. Versions of Measday's curriculum vitae 1974 2005.
- 6-3 General UBC archives Walter Gage Press and memorial card. 1969-1978.
- 6-4 Archive for UBC-TRIUMF. Correspondence, press clippings, articles, and invitation to dedication of TRIUMF. 1 photograph 20cm x 25cm B&W. 1969-2008.
- 6-5 General UBC archives. Correspondence and press clippings. 1979-2010
- 6-6 Graduate courses. UBC dept. of physics brochures. 1972-1995.
- 6-7 Memorial services. Clippings of obituaries, event programs, and remembrance cards from services. 1998-2013.
- 6-8 R.E. Taylor + others Nobel prize. Press clippings and articles. 1990-1997.
- 6-9 Nobel prizes. Clippings. 1996.

GENERAL SCHOLARSHIP SERIES

Reports sub-series

6-10 Meson factories – Report of ad hoc panel to the Office of Science and Technology.
 – 1964.

- 6-11 Properties of liquid deuterium. Articles and memo. 1966.
- 6-12 "Tables of vapour pressure and molar volume for liquid hydrogen and deuterium". 1965.
- 6-13 [Medium energy review committee notes.]. Notes, correspondence, and reports. 1974.
- 6-14 Expenses. Correspondence regarding the Medium Energy Review Committee. 1974.
- 6-15 Final report / Hildebrand panel. 1974.
- 6-16 Report to the Atomic Energy Commission and the National Science Foundation by the Committee to review US Medium Energy Science. – 1974.
- 6-17 Report to the Atomic Energy Commission and the National Science Foundation by the Committee to Review US Medium Energy Science. – 1974.
- 6-18 Report of the Joint Ad Hoc Advisory Committee on Nuclear Physics Priorities to the presidents of the Atomic Energy Control Board and the National Research Council of Canada. 1976.
- 6-19 [US Department of Energy Nuclear Research Review comments]. Measday's comments on various programs. 1978.
- 6-20 Final Report of the Ad Hoc Committee on Nuclear and Particle Physics to NSERC. 1979.
- 6-21 CAP review of high energy physics in Canada. 1981.
- 6-22 C.A.P. study of future research opportunities in physics low energy nuclear physics. Draft. 1981.
- 6-23 Review of Bates, LAMPF, the Belvac DOE [Department of Energy]. 1982.
- 6-24 A long range plan for nuclear science report by the DOE/NSF. 1983.
- 6-25 Department of Energy medium physics users program report of review panel. 1983.
- 6-26 Report of the Nuclear and Particle Physics Advisory Panel. 1993.
- 6-27 Report of the NSERC advisory committee for subatomic physics. 1995.
- 6-28 Subatomic physics (GRC 19) report for the 1998 NSERC reallocation exercise. Draft. 1997.

Intermediate Energy Nuclear Physics sub-series

- 6-29 Intermediate energy nuclear physics chapter i copy of first draft. [c. 1968].
- 6-30 Intermediate energy nuclear physics chapter ii manuscript. [c. 1968].
- 6-31 Intermediate energy nuclear physics chapter iii manuscript. [c. 1968].
- 6-32 *Intermediate energy nuclear physics* chapter iv –revised copy of manuscript. [c. 1968].
- 6-33 *Intermediate energy nuclear physics* chapter v manuscript. [c. 1968].
- 6-34 *Intermediate energy nuclear physics* chapter vi manuscript. [c. 1968].

- 6-35 Intermediate energy nuclear physics chapter vii manuscript. [c. 1968].
- 6-36 *Intermediate energy nuclear physics* chapter viii manuscript. [c. 1968].
- 6-37 *Intermediate energy nuclear physics* chapter ix copy of manuscript. [c. 1968].
- 6-38 *Intermediate energy nuclear physics* chapter x copy of manuscript and annotated typescript. [c. 1968].
- 6-39 Intermediate energy nuclear physics chapter xi manuscript. [c. 1968].
- 6-40 Copy 3 Intermediate energy nuclear physics chapters I, II, III, IV. 1968.
- 6-41 Copy 3 Intermediate energy nuclear physics chapters V, VI. 1968.
- 6-42 Copy 3 Intermediate energy nuclear physics chapters VII, VIII. 1968.
- 6-43 Copy 3 Intermediate energy nuclear physics chapters IX, X, XI. 1968.
- 6-44 *Intermediate energy nuclear physics* figures originals. [1968?-1978].

BOX 7

- 7-1 *Intermediate energy nuclear physics* corrections. 1968.
- 7-2 Correspondence regarding publishing of *Intermediate energy nuclear physics*. 1966-1969.
- 7-3 [Photographic prints for *Intermediate energy nuclear physics*]. 3 photographs. [c. 1970].
- 7-4 *Intermediate energy nuclear physics* royalties. 1970-1980.
- 7-5 *Intermediate energy nuclear physics* annotated original edition. [1970-1978].
- 7-6 [*Intermediate energy nuclear physics* new edition correspondence.] 1967, 1978.