

Education

Atominstut of the Austrian Universities, Vienna University of Technology

Ph.D. in Nuclear Physics (Dec 2006)

Dissertation Title: “Reliability of optical potentials for nuclear data evaluation”

Università degli Studi di Milano

Dottore Magistrale in Physics (Oct 2002)

Thesis Title: “Emissions of intermediate mass fragments in the interaction of ^{16}O with ^{59}Co and ^{93}Nb ”

Research Activities

Oak Ridge National Laboratory, Nuclear Data Group

Distinguished R&D Nuclear Data Scientist (Apr 2011–present)

- R-Matrix analyses (nearly 20) and related uncertainty quantification from light nuclei to heavy fissile actinides supported by the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) within Nuclear Criticality Safety Program (NCSP)
- Fission product yield analyses for the entire library (about 50 nuclei) within Nuclear Regulatory Commission (NRC) and Defense Threat Reduction Agency (DTRA) programs
- Uncertainty quantification on resonance parameters, cross sections, neutron multiplicities, and fission product yields
- Neutron source quantification from (α, n) reactions supported by the US Department of Energy National Nuclear Security Administration Office of Defense Nuclear Nonproliferation Research and Development NA-22
- Provide mentorship to junior scientific staff

Brookhaven National Laboratory, National Nuclear Data Center

Assistant Nuclear Physicist (Jan 2010–Apr 2011)

Post-doctoral Research Associate (Jan 2007–Dec 2009)

- Project on uncertainty quantification for evaluated nuclear data libraries supported by the U.S. Department of Energy (DOE) National Nuclear Security Administration (NNSA) within Nuclear Criticality Safety Program (NCSP)
- Nuclear data analyses within Hauser-Feshbach statistical model and exciton preequilibrium model for ^{23}Na , ^{55}Mn , ^{90}Zr , and ^{239}Pu

Clearance

Q-clearance holder

Committees and advisory groups

- Nuclear Data Advisory Group (member)
- Cross Section Evaluation Working Group
 - Executive committee (member)
 - Covariance committee (member)
 - Fission product yield committee (member)
 - Charged-particle sub-library (chair)
- Nuclear Data Working Group (member)
- Working Party on International Nuclear Data Evaluation
- R-Matrix Workshop on Methods and Applications committee
- Consultant to the International Nuclear Data Evaluation Network at the International Atomic Energy Agency: light nuclei, structural materials, fissile heavy nuclei, charged-particle reactions, and nuclear data processing

Skills

Fortran, C++, LaTeX, GitHub, Shell scripting

Codes: SAMMY, EMPIRE, Talys, ORIGEN, NJOY, AMPX, MCNP, SCALE

Languages

Italian (native speaker)

English (full professional proficiency)

German (elementary proficiency)

Military Service

Artillery, Italian Army, “Reggimento Artiglieria a Cavallo” (2001)

Citations

Google Scholar	All	Since 2019
Citations	9956	4592
h-index	29	16
i10-index	49	29

Publications

- E. Leal-Cidoncha, A. Couture, E. M. Bond, et al., “Measurement of the neutron-induced capture-to-fission cross section ratio in ^{233}U at LANSCE,” *Phys. Rev. C* **108**, 014608 (2023)
- M. T. Pigni, “Quantification of the $^{35}\text{Cl}(n,p)$ reaction channel,” *Progress in Nuclear Energy*, **157**, 104551 (2023)
- M. T. Pigni, R. Capote, A. Trkov, “Progress on the reevaluation and validation of the $n+^{233}\text{U}$ neutron cross sections,” *Annals of Nuclear Energy*, **163**, 108595 (2021)
- G. P. A. Nobre, M. T. Pigni, D. A. Brown, et al., “Newly evaluated neutron reaction data on chromium isotopes,” *Nuclear Data Sheets*, **173**, 1 (2021)
- M. T. Pigni and S. Croft, “On the consistency of $^{16}\text{O}(n,\alpha)$ cross sections,” *Phys. Rev. C* **102**, 014618 (2020)
- M. T. Pigni, I. C. Gauld, S. Croft, “ (α,n) reactions in oxide compounds calculated from the R-matrix theory,” *Progress in Nuclear Energy*, **118**, 103130 (2020)
- I. J. Thompson, R. J. DeBoer, P. Dimitriou, et al., “Verification of R-matrix calculations for charged-particle reactions in the resolved resonance region for the ^7Be system,” *E. Phys. J. A*, **55**(6), 92 (2019)
- M. B. Chadwick, R. Capote, A. Trkov, et al., “The CIELO Collaboration Summary Results: International Evaluations of Neutron Reactions on Oxygen, Iron, Uranium and Plutonium,” *Nuclear Data Sheets* **148**, 189 (2018)
- R. Capote, A. Trkov, M. Sin, et al., “Evaluation of Neutron-induced Reactions on ^{235}U and ^{238}U targets up to 30 MeV,” *Nuclear Data Sheets* **148**, 254 (2018)
- D. A. Brown, M. B. Chadwick, R. Capote, et al., “The 8th Major Release of the Nuclear Reaction Data Library with CIELO-project Cross Sections, New Standards and Thermal Scattering Data,” *Nuclear Data Sheets* **148**, 1 (2018)
- M. T. Pigni, S. Croft, I. C. Gauld, “Uncertainty quantification in (α,n) neutron source calculations for an oxide matrix,” *Progress in Nuclear Energy* **91**, 147 (2016)
- T. M. Shneidman, A. V. Andreev, C. Massimi, et al., “Angular Anisotropy of the Fission Fragments in the Dinuclear System Model,” *Nucl. Phys. Review* **32**, 175 (2015)
- M. T. Pigni, M. W. Francis, I. C. Gauld, “Investigation of Inconsistent ENDF/B-VII.1 Independent and Cumulative Fission Product Yields with Proposed Revisions,” *Nuclear Data Sheets* **123**, 231 (2015)
- I. C. Gauld, M. T. Pigni, G. Ilas, “Validation and Testing of ENDF/B-VII Decay Data,” *Nuclear Data Sheets* **120**, 33 (2014)
- E. Leal-Cidoncha, I. Duran, C. Paradela, et al., “Study of $^{234}\text{U}(n,f)$ Resonances Measured at the CERN nTOF Facility,” *Nuclear Data Sheets* **119**, 42 (2014)

- G. Palmiotti, M. Salvatores, G. Aliberti, et al., “Combined Use of Integral Experiments and Covariance Data,” *Nuclear Data Sheets* **118**, 596 (2014)
- M. T. Pigni, L. C. Leal, M. E. Dunn, et al., “Evaluation of Tungsten Neutron Cross Sections in the Resolved Resonance Region,” *Nuclear Data Sheets* **114**, 147 (2013)
- F. Belloni, M. Calviani, N. Colonna, et al., “Measurement of the neutron-induced fission cross-section of ^{241}Am at the time-of-flight facility nTOF,” *Eur. Phys. J. A* **49**, 2 (2013)
- F. Gunsing, E. Berthoumieux, G. Aerts, et al., “Measurement of resolved resonances of $^{232}\text{Th}(n,\gamma)$ at the nTOF facility at CERN,” *Phys. Rev.* **C85**, 064601 (2012)
- C. Guerrero D. Cano-Ott, E. Mendoza, et al., “Measurement and resonance analysis of the ^{237}Np neutron capture cross section,” *Phys. Rev.* **C85**, 044616 (2012)
- C. Massimi, P. Koehler, S. Bisterzo, et al., “Resonance neutron-capture cross sections of stable magnesium isotopes and their astrophysical implications,” *Phys. Rev.* **C85**, 044615 (2012)
- M. Calviani, M. H. Meaze, N. Colonna, et al., “Neutron-induced fission cross section of ^{245}Cm : New results from data taken at the time-of-flight facility nTOF,” *Phys. Rev.* **C85**, 034616 (2012)
- S. Hoblit, Y. -S. Cho, M. Herman, et al., “Neutron Cross Section Covariances for Structural Materials and Fission Products,” *Nuclear Data Sheets* **112**, 3075 (2011)
- M. B. Chadwick, M. Herman, P. Obložinský, et al., “ENDF/B-VII.1 Nuclear Data for Science and Technology: Cross Sections, Covariances, Fission Product Yields and Decay Data,” *Nuclear Data Sheets* **112**, 2887 (2011)
- F. Belloni, M. Calviani, N. Colonna, et al., “Measurement of the neutron-induced fission cross-section of ^{243}Am relative to ^{235}U from 0.5 to 20 MeV,” *Eur. Phys. J. A* **47**, 160 (2011)
- G. Tagliente, P. M. Milazzo, K. Fujii, et al., “ $^{96}\text{Zr}(n,\gamma)$ measurement at the nTOF facility at CERN,” *Phys. Rev.* **C84**, 055802 (2011)
- R. Sarmiento, M. Calviani, J. Praena, et al., “Measurement of the $^{236}\text{U}(n,f)$ cross section from 170 meV to 2 MeV at the CERN nTOF facility,” *Phys. Rev.* **C84**, 044618 (2011)
- G. Tagliente, P. M. Milazzo, K. Fujii, et al., “Neutron capture on ^{94}Zr : Resonance parameters and Maxwellian-averaged cross sections,” *Phys. Rev.* **C84**, 015801 (2011)
- D. Tarrío, L. Tassan-Got, L. Audouin, et al., “Neutron-induced fission cross section of $^{\text{nat}}\text{Pb}$ and ^{209}Bi from threshold to 1 GeV: An improved parametrization,” *Phys. Rev.* **C83**, 044620 (2011)
- C. Lederer, N. Colonna, C. Domingo-Pardo, et al., “ $^{197}\text{Au}(n,\gamma)$ cross section in the unresolved resonance region,” *Phys. Rev.* **C83**, 034608 (2011)
- M. T. Pigni, M. Herman, P. Obložinský, et al., “Sensitivity analysis of neutron total and absorption cross sections within the optical model,” *Phys. Rev.* **C83**, 024601 (2011)

- F. Belloni, M. Calviani, N. Colonna, et al., “Neutron-induced fission cross-section of ^{233}U in the energy range $0.5 < E_n < 20$ MeV,” *Eur. Phys. J. A* **47**, 2 (2011)
- C. Paradela, L. Tassan-Got, L. Audouin, et al., “Neutron-induced fission cross section of ^{234}U and ^{237}Np measured at the CERN Neutron Time-of-Flight (nTOF) Facility,” *Phys. Rev. C* **82**, 034601 (2010)
- G. Tagliente, P. M. Milazzo, K. Fujii, et al., “The $^{92}\text{Zr}(n,\gamma)$ reaction and its implication for stellar nucleosynthesis,” *Phys. Rev. C* **81**, 055801 (2010)
- C. Massimi, C. Domingo-Pardo, G. Vannini, et al., “ ^{197}Au cross-section in the resonance region,” *Phys. Rev. C* **81**, 044616 (2010)
- M. Calviani, J. Praena, U. Abbondanno, et al., “High-accuracy $^{233}\text{U}(n,f)$ cross-section measurement at the white-neutron source nTOF from near-thermal to 1 MeV neutron energy,” *Phys. Rev. C* **80**, 044604 (2009)
- C. Guerrero, U. Abbondanno, et al., “The nTOF Total Absorption Calorimeter for neutron capture measurements at CERN,” *Nucl. Inst. Meth. In Phys. Res. A* **608**, 424 (2009)
- M. T. Pigni, M. Herman, and P. Obložinský, “Extensive set of cross section covariance estimates in the fast neutron energy region,” *Nucl. Sci. Eng.* **162**, 25 (2009)
- C. Domingo-Pardo, U. Abbondanno, G. Aerts, et al., “The measurement of the $^{206}\text{Pb}(n,\gamma)$ cross section and stellar implications,” *J. Phys. G: Nucl. Phys.* **35**, 014020 (2008)
- M. Mosconi, M. Heil, F. Käppeler, et al., “Nuclear physics for the Re/Os clock,” *J. Phys. G: Nucl. Phys.* **35**, 014015 (2008)
- M. Herman, M. T. Pigni, P. Obložinský, et al., “Development of covariance capabilities in EMPIRE code,” *Nuclear Data Sheets* **109**, 2752 (2008)
- R. C. Little, T. Kawano, G. D. Hale et al., “Low-fidelity Covariance Project,” *Nuclear Data Sheets* **109**, 2828 (2008)
- G. Tagliente, P. M. Milazzo, K. Fujii, et al., “Experimental study of the $^{91}\text{Zr}(n,\gamma)$ reaction up to 26 keV,” *Phys. Rev. C* **78**, 045804 (2008)
- G. Tagliente, K. Fujii, P. M. Milazzo, et al., “Neutron capture cross section of ^{90}Zr : Bottleneck in the s-reaction flow,” *Phys. Rev. C* **77**, 035802 (2008)
- M. T. Pigni, M. Herman, P. Obložinský, “Estimated ^{55}Mn and ^{90}Zr cross section covariances in the fast neutron energy region,” *Nuclear Data Sheets* **109**, 2900 (2008)
- F. Gunsing, U. Abbondanno, G. Aerts, et al., “Status and outlook of the neutron time-of-flight facility nTOF at CERN,” *Nucl. Inst. Meth. In Phys. Res. B* **261**, 925 (2007)
- G. Aerts, U. Abbondanno, H. Alvarez, et al., “Neutron capture cross section of ^{232}Th measured at the nTOF facility at CERN in the unresolved resonance region up to 1 MeV,” *Phys. Rev. C* **73**, 054610 (2006)

- S. Marrone, U. Abbondanno, G. Aerts, et al., “Measurement of the $^{151}\text{Sm}(n,\gamma)$ cross section from 0.6 eV to 1 MeV via the neutron time-of-flight technique at the CERN nTOF facility,” *Phys. Rev. C* **73**, 034604 (2006)
- H. Leeb, E. Jericha, J. Kasper, et al., “Unique reconstruction of depth profiles in neutron specular reflectometry: practical aspects,” *Physica B* **356**, 41 (2005)
- E. Gadioli, G. F. Steyn, F. Albertini, et al., “Emission of intermediate-mass fragments in the interaction of ^{16}O with ^{59}Co , ^{93}Nb and ^{197}Au ,” *Eur. Phys. J. A* **17**, 195 (2003)

Reports

- M. T. Pigni, J. D. McDonnell, K. H. Guber, “Resonance Parameter Evaluation of $n+^{88}\text{Sr}$ reactions for ENDF/B-VIII.1 Library,” ORNL/LTR-2023/3004 (2023)
- C. W. Chapman, M. T. Pigni, K. H. Guber, et al., “*R*-matrix Resolved Resonance Region Evaluation of $^{140,142}\text{Ce}$,” ORNL/TM-2023/2924 (2023)
- M. T. Pigni, “*R*-MATRIX ANALYSIS AND STATISTICAL PROPERTIES OF DYSPROSIUM ISOTOPES IN THE NEUTRON ENERGY RANGE UP TO A FEW KEV,” ORNL/TM-2023/2925 (2023)
- M. Dupont, D. Hames, G. Harms, et al., “Integral Experiment Request 554 CED-1 Summary Report,” ORNL/TM-2022/2682 (2022)
- A. Lang, M. T. Pigni, B. J. Marshall, et al., “DOE-EM Nuclear Criticality Safety Needs FY22 Task 2: Nuclear Data Review,” ORNL/LTR-2022/2531 (2022)
- M. T. Pigni, “Standardizing a Renewed Fission Product Yield Library and Related Covariances (Part II),” ORNL/TM-2022/2590 (2022)
- K. C. Bledsoe and M. T. Pigni, “Fission Product Yield Data Adjustment in a Prototype Version of TSURFER,” ORNL/TM-2021/1939 (2021)
- M. S. Smith, D. A. Brown, C. E. Romano, et al., “ (α,n) nuclear data scoping study,” ORNL/TM-2020/1789 (2020)
- M. T. Pigni and K. C. Bledsoe, “Standardizing a Renewed Fission Product Yield Library and Related Covariances (Part I),” ORNL/TM-2020/1660 (2020)
- M. T. Pigni, “ASSESSMENT OF $^{46,47,48,49,50}\text{Ti}$ CROSS SECTIONS IN THE ENDF/B-VIII.0 LIBRARY IN THE THERMAL NEUTRON ENERGY RANGE,” ORNL/LTR-2019/1285 (2019)
- M. T. Pigni, K. H. Guber, G. Arbanas, et al., “EVALUATION AND VALIDATION OF $^{28,29,30}\text{Si}$ CROSS SECTIONS IN THE RESOLVED RESONANCE REGION,” ORNL/LTR-2018/1044 (2019)

- M. T. Pigni, “ASSESSMENT OF ^{23}Na CROSS SECTIONS IN THE ENDF/B-VIII.0 LIBRARY IN THE NEUTRON ENERGY RANGE UP TO 0.1 EV,” ORNL/LTR-2018/487 (2018)
- M. W. Francis, C. F. Weber, M. T. Pigni, et al., “Reactor Fuel Isotopics and Code Validation for Nuclear Applications,” ORNL/TM-2014/464 (2015)
- G. Ilas, I. C. Gauld, R. M. Westfall, et al., “Evaluation of Hanford B Reactor Experiments (PTA-069 and PTA-084) for Code and Data Benchmarking,” ORNL/TM-2014/53 (2014)
- Members of Subgroup 24, “Covariance Data in the Fast Neutron Region,” Nuclear Science NEA/WPEC-24, NEA/NSC/WPEC/DOC(2010)427, OECD/NEA 2011
- M. Herman, P. Obložinský, C. M. Mattoon, et al., “COMMARA-2.0 Neutron Cross Section Covariance Library,” Internal Report BNL-94830-2011
- P. Obložinský, C. M. Mattoon, M. Herman et al., “Progress on Nuclear Data Covariances: AFCI-1.2 Covariance Library,” Internal Report BNL- 90897-2009
- M. T. Pigni, F. S. Dietrich, M. Herman et al., “Can cross sections be accurately known a priori?,” Internal Report BNL-81627-2008-CP
- M. Herman, S. F. Mughabghab, P. Obložinský, et al., “Neutron cross section covariances in the resolved resonance region,” Internal report BNL-80173-2008. April 2008
- H. Leeb and M. T. Pigni, “Theoretical calculations of covariances for reactions on Lithium isotopes,” Internal Report ATI-NDC-2006-01. January 2006
- H. Leeb, K. Nikolics, and M. T. Pigni, “Theoretical calculations of covariances for reactions on Oxygen isotopes,” Internal Report TTMN- 2006-139. February 2006
- M. T. Pigni and H. Leeb, “Prior covariances with Talys for ^{208}Pb ,” Internal Report EFF-DOC-980, May 2006
- M. T. Pigni and H. Leeb, “Covariance analysis of the $^{232}\text{Th}(n,\gamma)$ measurements at the nTOF facility at CERN,” Internal Report ATI-NDC- 2004-03, March 2004
- M. T. Pigni and H. Leeb, “Covariance analysis of the $^{151}\text{Sm}(n,\gamma)$ measurements at the nTOF facility at CERN,” Internal Report ATI-NDC- 2004-02. February 2004
- M. T. Pigni and H. Leeb, “Covariances for nuclear data evaluations strongly relying on modeling,” Internal Report EFF-DOC-888

Conference Proceedings

- M. T. Pigni, R. Capote, A. Trkov, “Low-Energy Reactions of the $n+^{233}\text{U}$ Nuclear Compound System and Its Initial Validation,” 2021 ANS Winter Meeting and Technology Expo **125**, 581–584 (2022)

- D. Wiarda, M. T. Pigni, V. Sobes, et al., “Dr. Mark Williams’ Three Contributions to nuclear Data Covariance,” *Transactions*, **121**, 1, 1496 (2019)
- C. Chapman, M. T. Pigni, K. H. Guber, “Progress on $^{140,142}\text{Ce}$ Neutron Cross Section Resolved Resonance Region Evaluations,” 11th International Conference on Nuclear Criticality Safety (ICNC 2019), 15–20 September, Paris, France
- G. Arbanas, J. Feng, Z. J. Clifton, et al., “Bayesian optimization of generalized data,” 4th International Workshop on Nuclear Data Covariances (CW2017), 2–6 October, 2017, Aix en Provance, France, EPJ Web of Conferences **4**, 30 (2018)
- M. T. Pigni, I. C. Gauld, S. Croft, “ $^{17,18}\text{O}(\alpha, n)$ Evaluated Cross Sections to Improve National Security Applications,” Advances in Nuclear Nonproliferation Technology and Policy Conference (ANTPC) 2018, 11–15 September, Orlando, FL, US, p. 89 (2018)
- M. T. Pigni, G. Žerovnik, L. C. Leal, “Validation of W Cross Sections in the Neutron Energy Region up to 100 keV,” EPJ Web of Conferences **146**, 06010 (2017)
- M. T. Pigni, R. Capote, A. Trkov, et al., “n+ ^{235}U Resonance Parameters and Neutrons Multiplicities in the Energy Region below 100 eV,” EPJ Web of Conferences **146**, 02011 (2017)
- M. B. Chadwick, R. Capote, A. Trkov, et al., “The CIELO collaboration: Progress in international evaluations of neutron reactions on Oxygen, Iron, Uranium and Plutonium,” EPJ Web of Conferences **146**, 02001 (2017)
- A. Trkov, R. Capote, M. T. Pigni, et al. “Evaluation of the neutron induced reactions on ^{235}U up from 2.25 keV up to 30 MeV,” EPJ Web of Conferences **146**, 02029 (2017)
- M. T. Pigni, I. C. Gauld, S. Croft, “Early Applications of the *R*-matrix SAMMY Code for Charged-particle Induced Reactions,” EPJ Web of Conferences **146**, 02019 (2017)
- G. Arbanas, V Sobes, A. Holcomb, et al., “Generalized Reich-Moore *R*-matrix Approximation,” EPJ Web of Conferences **146**, 12006 (2017)
- I. C. Gauld, S. Croft, M. T. Pigni, et al., “Systematic Approach to Nuclear Data Uncertainty Quantification for Nuclear Security Applications,” Advances in Nuclear Nonproliferation Technology & Policy Conference (2016)
- M. T. Pigni and L. C. Leal, “EVALUATED $^{182,183,184,186}\text{W}$ NEUTRON CROSS SECTIONS AND COVARIANCES IN THE RESOLVED RESONANCE REGION,” ICNC 2015, Charlotte, North Carolina, September 13-17, 2015 (2015)
- M. L. Williams, F. Havluj, D. Wiarda, et al., “SCALE UNCERTAINTY QUANTIFICATION METHODOLOGY FOR CRITICALITY SAFETY ANALYSIS OF USED NUCLEAR FUEL,” ANS NCS D 2013 - Criticality Safety in the Modern Era: Raising the Bar Wilmington, NC, September 29-October 3, 2013, on CD-ROM, American Nuclear Society, LaGrange Park, IL (2013)

- T. M. Shneidman, A. V. Andreev, M. T. Pigni, et al., “Angular Anisotropy of the Fission Fragments in the Dinuclear System Model,” *Nuclear Theory* Vol. 31, ed. A. Georgieva, N. Minkov, Heron Press, Sofia (2012) p. 25
- T. M. Shneidman, A. V. Andreev, M. T. Pigni, et al., “Collective spectra along the fission barrier,” NSRT12 - International Conference on Nuclear Structure and Related Topics, Dubna, Russia, July 3-7, 2012, *EPJ Web of Conferences* Vol. 38 (2012)
- M. T. Pigni, M. E. Dunn, and K. H. Guber, “ ^{183}W Resonance Parameter Evaluation in the Neutron Energy Range Up to 5 keV,” *PHYSOR 2012 - Advances in Reactor Physics - Linking Research, Industry, and Education*, Knoxville, Tenn., April 15-20, 2012, on CD-ROM, American Nuclear Society, LaGrange Park, IL (2012)
- M. Herman, P. Obložinský, C. Mattoon, et al., “AFCI-2.0 Library of Neutron Cross Section Covariances,” *Trans. Am. Nucl. Soc.*, **140**, 769 (2011)
- G. Palmiotti, M. Salvatores, H. Hiruta, et al., “Use of covariance matrices in a consistent (multiscale) data assimilation for improvement of basic nuclear parameters in nuclear reactor applications: from meters to femtometers,” *J. Korean Phys. Soc.* **59**, 1123 (2011)
- G. Palmiotti, M. Assawaroongruengchot, M. Salvatores, et al., “Nuclear Data Target Accuracies for Generation-IV Systems Based on the Use of New Covariance Data,” *J. Korean Phys. Soc.* **59**, 1264 (2011)
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- C. Paradela, L. Tassan-Got, L. Audouin, et al., “ $^{237}\text{Np}(n,f)$ Cross Section: New Data and Present Status,” *J. Korean Phys. Soc.* **59**, 1908 (2011)
- M. Calviani, S. Andriamonje, E. Chiaveri, et al. “Fission Cross-section Measurements of ^{233}U , ^{245}Cm and $^{241,243}\text{Am}$ at CERN nTOF Facility,” *J. Korean Phys. Soc.* **59**, 1912 (2011)
- M. Herman, M. T. Pigni, F. S. Dietrich, et al., “Optical Model and Cross Section Uncertainties,” CNR*09 - Second International Workshop on Compound Nuclear Reactions and Related Topics, Bordeaux, France, October 5-8, 2009
- M. T. Pigni, M. Herman, C. M. Mattoon, et al., “Evaluation of ^{23}Na Cross Sections for Nuclear Data Assimilation,” Wonder 2009 - 2nd International Workshop On Nuclear Data Evaluation for Reactor application, CEA Cadarache Château, France, September 29 - October 2, 2009

- M. T. Pigni, M. Herman, and P. Obložinský, “Extensive set of low-fidelity cross section covariances in fast neutron region,” International Conference on the Physics of Reactors <<Nuclear Power: A sustainable Resource>>, Interlaken, Switzerland, September 14-19, 2008
- M. T. Pigni, M. Herman, P. Obložinský, et al., “Extensive set of low- fidelity covariances in fast neutron region,” 8th International Meeting on Nuclear Applications of Accelerator Technology, Pocatello, ID, July 30-August 2, 2007 p. 753
- M. Herman, S. F. Mughabghab, P. Obložinský, et al., “EMPIRE ultimate expansion: resonances and covariances,” International Conference on Nuclear Data for Science & Technology, Nice, France, April 22-27, 2007
- D. Rochman, M. Herman, P. Obložinský, et al., “Neutron cross section covariances from thermal energy to 20 MeV,” International Conference on Nuclear Data for Science & Technology, Nice, France, April 22-27, 2007
- C. Guerrero, U. Abbondanno, G. Aerts, et al., “The neutron capture cross sections of ²³⁷Np (n,γ) and ²⁴⁰Pu (n,γ) and its relevance in the transmutation of nuclear waste,” International Conference on Nuclear Data for Science & Technology, Nice, France, April 22-27, 2007, p. 627
- H. Leeb and M. T. Pigni, “Basics statistics and consistent covariances for nuclear data files,” Workshop on perspective of nuclear data in the next decade, Bruyères-le-Châtel, France, September 6-28, 2005, p. 233
- H. Leeb, M. T. Pigni, and I. Raškinytė, “Covariances for evaluations based on extensive modeling,” International Conference on NUCLEAR DATA for Science & Technology, Santa Fe, NM, September 28 - October 1, 2004, p. 161
- M. T. Pigni and H. Leeb, “Uncertainty estimates of evaluated ⁵⁶Fe cross sections based on extensive modeling at energies beyond 20 MeV,” Proceedings of the International Workshop on Nuclear Data for the Transmutation of Nuclear Waste, GSI-Darmstadt, September 1-5, 2003
- E. Gadioli, G. F. Steyn, C. Birattari, et al., “Emission of Boron Fragments in Reactions Induced by ¹⁶O up to 25 MeV/amu,” Nuclear Theory’21, ed. V. Nikolaev, Heron Press, Sofia (2002) p. 223