PERSONAL INFORMATION

LILIANA MOU

WORK EXPERIENCE

From September 2018

INFN Research fellow (intermediate)

INFN-LNL Bando N° 19804/2018
"Installation of a beta and gamma spectroscopy laboratory and implementation of related Quality Assurance and Quality Control activities for the LARAMED project"

From September 2015 to September 2018

INFN Research fellow

INFN-LNL Bando N° 17327/2015
"Installation of a beta and gamma spectroscopy laboratory for the LARAMED project"

From July 2013 to June 2015

Research scholarship

Centro di GeoTecnologie – University of Siena, Italy – Bando N° 372/2013
"Realizzazione di un software di analisi AGRS comprendente una GUI da utilizzarsi nell'ambito del progetto SAMORAD"

From July 2011 to June 2013

INFN Training grant in the field of nuclear energy

INFN Bando N° 14181
National Laboratories of Legnaro (INFN-LNL), Padova, Italy

From December 2010 to May 2011

Post-graduate scholarship

Centro di GeoTecnologie – University of Siena, Italy – N° 2409/2009-2010

EDUCATION

October 2020

Ph.D. in Physics

Department of Physics and Earth Sciences (XXXII cycle), University of Ferrara, Italy
Evaluation: Very good
Title: Cyclotron production of theranostic radionuclides: ^{67}Cu and ^{47}Sc
Supervisors: Prof. Adriano Duatti and Juan Esposito

2010

Second level Master in GeoTecnologie Ambientali

Centro di GeoTecnologie – University of Siena, Italy
Experimental thesis: Studio della qualità di misure di spettroscopia gamma per il monitoraggio della radioattività in situ
Supervisor: Fabio Mantovani

2009

Master's degree in Physics

University of Cagliari, Italy
(20/S - Classe delle lauree specialistiche in fisica)
degree mark: 109/110
Experimental thesis: Raggi Cosmici nel rivelatore per muoni dell'esperimento LHCb
Supervisor: Prof. Biagio Saitta

2004

Bachelor's Degree in Physics

University of Cagliari, Italy
(25 - Classe delle lauree in scienze e tecnologie fisiche)
degree mark: 107/110
Experimental thesis: Efficienza e uniformità di un rivelatore a tripla GEM
Supervisor: Prof. Biagio Saitta

2000

High school diploma, 98/100

Scientific high school "A. Businco", Jerzu (OG)

RESEARCH ACTIVITY

INFN projects

2021-2023. REMIX, Research on Emerging Medical radIonuclides from the X-sections, LNL, CSN5; PI: G. Pupillo

Research on cyclotron-based production of Sc-47 and isotopes of terbium for medical applications.
I am responsible of WP2 regarding the measurement of the proton-induced reactions to produce Sc-47 by using Ti-49 and Ti-50 enriched targets; responsible for γ-spectroscopy acquisitions, data analysis, and cross section determination of the nuclear reactions $^{48/49/50}$Ti(p,x)^{47}Sc.

The target homogeneity is a fundamental parameter that has to be carefully determined, e.g. Scanning Electron Microscope (SEM) imagies for the surface and Elastic Backscattering Spectrometry (EBS) analysis to determine the deposited amount.
Coordinator of the target characterization activities in collaboration with S. Cisternino (WP1: targetry) and responsible of the experimental activities for the proton-induced cross section measurements, including the irradiation runs at the ARRONAX facility (Nantes, France).

2021-2022. INTEFF_TOTEM, magneTron sputtering cyclotrOn TargEt Manufacturing, LNL, Poc MISE; PI: S. Cisternino

Enhancement of the INFN patent WO 2019/053570: R&D activities for the realization of targets for radioisotopes production both with Magnetron Sputtering (MS) and Spark Plasma Sintering (SPS) techniques.
My contribution to the project regards the realization and characterization of the first ZnO pellet made with the SPS technique, the first step for the realization of the composite target, proposed in the international patent for the production of Cu-67 (n° WO 2019/220224 A1; November 2019; inventors: **L. Mou**, G. Pupillo, P. Martini, M. Paquali).

2018-2021. METRICS, Multimodal pET/mRi Imaging with Cyclotron-produced Mn-52/51 and stable paramagnetic Mn iSotopes, LNL, CSN5; PI: J. Esposito

Research on Mn-52 cyclotron production with the aim to achieve a matching between both PET and MRI scans acquired by using a chemically identical contrast and radioactive agent.
My contribution to the METRICS project regards all the gamma-spectrometry acquisitions and data analysis carried out at the Sacro Cuore Don Calabria hospital (Negrar, VR, Italy) over the years.

2018-2019. E_PLATE, Electrostatic Powder pLating for Accelerator TargEts, LNL, CSN5; PI: H. Skliarova

The E_PLATE project aims to study the HIgh energy VIbrational Powder Plating (HIVIPP) technique to produce isotopically enriched targets useful for nuclear physics experiments, e.g. cross sections measurements.
I was involved in the characterization of the Ti-48 targets to be used in the PASTA project. The realized targets were characterized with both the SEM to verify the homogeneity of the metallic Ti-48 deposit on the aluminum substrate, and the EBS to determine the quantity of material deposited.

2017-2018. PASTA, Production with Accelerator of Sc-47 for Theranostic Applications; LNL, CSN5; PI: G. Pupillo

Research on Sc-47 cyclotron production. Active participation in both planning and measurement runs at the ARRONAX facility (France). My main contribution to the PASTA project has regarded all the γ-spectrometry acquisitions of the irradiated targets, data analysis, and cross section determination.

TERABIO, Study and development of high-power targets for medical radionuclides cyclotron production, funded in 2016 by Ministero dell'Università e della Ricerca (MIUR); premium project

The TERABIO project aims to search for innovative technological solutions in high power target realization for radionuclides production. Thanks to the outcomes of the COME project, in the framework of TERABIO project it was patented the idea of an optimized layout for a target aimed at ^{67}Cu production, described in the National (ref. number 102018000005379) and International Patent (n° WO 2019/220224 A1; November 2019). I am the first author of these patents.

2016. COME, Copper Measurement; Cu-67 cyclotron production; PI: G. Pupillo

Research on Cu-67 cyclotron production. Active participation in all the aspects of the COME project, incuding planning and measurement runs at the ARRONAX facility (France), γ-spectrometry of the irradiated targets, data analysis, and cross section determination.

2015-2017. TECHNOSP, Tc-99m cyclotron production technology development; PI: J. Esposito

Research on cyclotron-based Tc-99m production. The entire production cycle of Tc-99m starts from the realization of the targets, irradiation at a hospital cyclotron, radiochemical processing, γ-spectrometry of the solution obtained and recovery of the irradiated material. Mainly, my contribution to the project was the γ-spectrometry analysis for the determination of the radionuclidic purity of the final product obtained.

LARAMED (LAboratoty of Radioisotopes for MEDicine) funded in 2014 by Ministero dell'Università e della Ricerca (MIUR); premium project

Research on innovative radioisotopes production for medical application. Mainly, my contribution to the project was the purchase of the two HPGe detectors suitable for the γ-spectrometry measurements planned in the LARAMED project. I was also in charge of the γ-spectrometry laboratory layout included in the RILAB compound in the new SPES building.

ITALRAD (ITALian RADioactive project) funded in 2012 by Ministero dell'Università e della Ricerca (MIUR); premium project; PI: F. Mantovani

Research on monitoring natural radioactivity. I was also in charge of the γ-spectrometry measurements and data analysis.

2010-2013. Rad_Monitor; PI: C.R. Alvarez

Research on monitoring natural radioactivity. I was involved in the collection of the rock and soil samples in the Veneto region. I was in charge of the samples measurement with HPGe and spectra analysis. I was involved in the realization of 34 flights to cover the flat territory of the Veneto Region and I was in charge of the following data analysis. I contribute to the realization of the natural radioactivity map of the Veneto region.

2010. Rad_Nat; PI: F. Mantovani

Research on monitoring natural radioactivity. I was involved in the statistical analysis of the radioactivity content of about 1800 samples of rock and soil collected in the territory of the Tuscany Region. I contribute to the realization of the natural radioactivity map of the Tuscany region.

PAC proposals for LNL accelerators: AN2000 and CN

2021. HIX proposal: Characterization of HIVIPP targets for the REMIX project

Spokesperson: S. Cisternino
Participants: S. Cisternino, M. Campostrini, L. De Dominicis, L. La Torre, **L. Mou**, G. Pupillo, V. Rigato
Assigned days: 3
Characterization runs with Ion Beam Analysis (IBA) techniques to quantify the composition and lateral homogeneity of isotopically enriched Ti-49 and Ti-50 targets.

2020. E-PLATE proposal: Electrostatic Powder pLating for Accelerator TargEts

Spokesperson: S. Cisternino
Participants: S. Cisternino, H. Skliarova, C. Rossi Alvarez, V. Rigato, G. Pupillo, **L. Mou**, M. Campostrini, G. Maggioni, D. Ceccato, L. La Torre
Assigned days at AN2000 accelerator: 4
Assigned days at CN accelerator: 4
Characterization runs with IBA techniques to quantify the composition and lateral homogeneity of isotopically enriched Ti-48 targets.

International Projects and Meetings

2019. Participation as external observer to the 3rd RCM of the IAEA Radioisotope Production and Radiation Technology Section CRP No. F22053 entitled "Alternative Production of 67Cu with High-performance cyclotron" for the CRP on "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (67Cu, 186Re, 47Sc)"
IAEA Headquarters, Wien, 4-8 Nov 2019
Information on the conclusion of the project: https://www.iaea.org/newscenter/news/concluded-crp-coordinated-research-project-crp-f22053-on-therapeutic-radiopharmaceuticals-labelled-with-new-emerging-radionuclides-67cu186re-47sc

2018. Invitation to the Technical Meeting organized by the IAEA Nuclear Data Section
IAEA Headquarters, Wien, December 2018

2018. Organization and participation as external observer of the 2nd RCM of the IAEA Radioisotope Production and Radiation Technology Section CRP No. F22053 entitled "Alternative Production of 67Cu with High-performance cyclotron" for the CRP on "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (67Cu, 186Re, 47Sc)"
INFN-LNL, Legnaro (PD), Italy, 5-9 March 2018

2016. Participation as external observer to the 1st RCM of the IAEA Radioisotope Production and Radiation Technology Section CRP No. F22053 entitled "Alternative Production of 67Cu with High-performance cyclotron" for the CRP on "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (67Cu, 186Re, 47Sc)"
IAEA Headquarters, Wien, 5-9 Sept 2016

TECHNOLOGICAL ACTIVITY

PATENTS

Internazional patent no. WO 2019/220224 A1, International Publication Date: 21 November 2019; International Application Number: PCT/IB2019/052609; Title: "A method and a target for the production of 67Cu"
Inventors: **Liliana Mou**, Gaia Pupillo, Petra Martini, Micòl Pasquali

National patent "A method and a target for the production of 67Cu", P2974IT00; Application submitted to Ufficio Italiano Brevetti e Marchi 15/05/2018 ref. number 102018000005379.
Inventors: **Liliana Mou**, Gaia Pupillo, Petra Martini, Micòl Pasquali

SCIENTIFIC PUBLICATIONS

Publications on referred journals

- L. De Nardo, G. Pupillo, **L. Mou**, J. Esposito, A. Rosato and L. Meléndez-Alafort, *A feasibility study of the Therapeutic Application of a Mixture of 64/67Cu Radioisotopes produced by cyclotrons with proton irradiation*, Submitted to Physics in Medicine and Biology (2021)

- L. De Nardo, G. Pupillo, **L. Mou**, D. Furlanetto, A. Rosato, J. Esposito and L. Meléndez-Alafort, *Preliminary dosimetric analysis of DOTA-folate radiopharmaceutical radiolabelled with 47Sc produced through natV(p,x)47Sc cyclotron irradiation*, Physics in Medicine and Biology (2021), https://doi.org/10.1088/1361-6560/abc811

- G. Pupillo, P. Antonini, M. Calderolla, A. Calore, D. Bettoni, A. Boschi, S. Cisternino, A. Duatti, F. Evangelisti, P. Favaron, G. Fiorentini, F. Gramegna, G. Keppel, M. Maggiore, P. Martini, **L. Mou**, M. Pasquali, L. Pranovi, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca, H. Skliarova and J. Esposito, *The Laramed Project at LNL: 67Cu and 47Sc Production for Theranostic Applications*, Proceeding of the 10th ICI (2020) AIP Conference Proceedings 2295, 020001, https://doi.org/10.1063/5.0032898

- H. Skliarova, S. Cisternino, L. Pranovi, **L. Mou**, G. Pupillo, V. Rigato, C. Rossi Alvarez, *HIVIPP deposition and characterization of isotopically enriched Titanium-48 targets for nuclear cross-section measurements*, Nuclear Inst. and Methods in Physics Research, A (2020) https://doi.org/10.1016/j.nima.2020.164371

- G. Pupillo, **L. Mou**, P. Martini, M. Pasquali, A. Boschi, G. Cicoria, A. Duatti, F. Haddad and J. Esposito, *Production of ^{67}Cu by enriched ^{70}Zn targets: first measurements of formation cross sections of ^{67}Cu, ^{64}Cu, ^{67}Ga, ^{66}Ga, ^{69m}Zn and ^{65}Zn in interactions of ^{70}Zn with protons above 45 MeV*, Radiochimica Acta (2020) https://doi.org/10.1515/ract-2019-3199

- G. Pupillo, **L. Mou**, A. Boschi, S. Calzaferri, L. Canton, S. Cisternino, L. De Dominicis, A. Duatti, A. Fontana, F. Haddad, P. Martini, M. Pasquali, H. Skliarova, J. Esposito, *Production of ^{47}Sc with natural vanadium targets: results of the PASTA project*, (2019) Journal of Radioanalytical and Nuclear Chemistry 297(3) - https://doi.org/10.1007/s10967-019-06844-8

- G. Pupillo, **L. Mou**, F. Haddad, A. Fontana, L. Canton, *New results on the ^{nat}V(p,x)^{43}Sc cross section: analysis of the discrepancy with previous data*, (2020) Nuclear Inst. and Methods in Physics Research, B 464: 32-35 – DOI: 10.1016/j.nimb.2019.11.032

- G. Pupillo, A. Fontana, L. Canton, F. Haddad, H. Skliarova, S. Cisternino, P. Martini, M. Pasquali, A. Boschi, J. Esposito, A. Duatti and **L. Mou**, *Preliminary results of the PASTA project* (2019) Colloquia: EuNPC 2018, IL NUOVO CIMENTO 42 C 139 - DOI 10.1393/ncc/i2019-19139-1

- J. Esposito, D. Bettoni, A. Boschi, M. Calderolla, S. Cisternino, G. Fiorentini, G. Keppel, P. Martini, M. Maggiore, **L. Mou**, M. Pasquali, L. Pranovi, G. Pupillo, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca, H. Skliarova, P. Favaron, A. Lombardi, P. Antonini, A. Duatti, *LARAMED: a LAboratory for Radioisotopes of MEDical interest*, (2019) Molecules, 24(1), 20 https://doi.org/10.3390/molecules24010020

- N. Uzunov, L. Melendez-Alafort, M. Bello, G. Cicoria, F. Zagni, L. De Nardo, A. Selva, **L. Mou**, C. Rossi Alvarez, G. Pupillo, G. Di Domenico, L. Uccelli, A. Boschi, F. Groppi, A. Salvini, A. Taibi, A. Duatti, P. Martini, M. Pasquali, M. Loriggiola, M. Marengo, L. Strada, S. Manenti, A. Rosato and J. Esposito – *Radioisotopic purity and imaging properties of cyclotron-produced ^{99m}Tc using direct ^{100}Mo(p,2n) reaction* (2018) Physics in Medicine and Biology 63, 185021 - https://doi.org/10.1088/1361-6560/aadc88

- P. Martini, A. Boschi, G. Cicoria, F. Zagni, A. Corazza, L. Uccelli, M. Pasquali, G. Pupillo, M. Marengo, M. Loriggiola, H. Skliarova, **L. Mou**, S. Cisternino, S. M. Carturan, L. Melendez Alafort, N. M. Uzunov, M. Bello, C. Rossi Alvarez, J. Esposito, A. Duatti *In-house Cyclotron Production of High-purity Tc-99m and Tc-99m Radiopharmaceuticals* (2018) Applied Radiation and Isotopes – https://doi.org/10.1016/j.apradiso.2018.05.033

- G. Pupillo, T. Sounalet, N. Michel, **L. Mou**, J. Esposito, F. Haddad, *New production cross sections for the theranostic radionuclide ^{67}Cu* (2018) Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms - Volume 415, Pages 41-47 - https://doi.org/10.1016/j.nimb.2017.10.022

- Caciolli, A.,Depalo, R.,Broggini, C.,Cognata, M.L.,Lamia, L., Menegazzo, R., **Mou, L.**, Puglia, S.M.R., Rigato, V., Romano, S., Alvarez, C.R., Sergi, M.L., Spitaleri, C., Tumino, A; *A new study of 10B(p,α)7Be reaction at low energies* (2016); The European Physical Journal A volume 52, Article number: 136; 10.1140/epja/i2016-16136-8

- M. Kaçeli Xhixha, M. Albèri, M. Baldoncini, G.P. Bezzon, G.P. Buso, I. Callegari, L. Casini, S. Cuccuru, G. Fiorentini, E. Guastaldi, F. Mantovani, **L. Mou**, G. Oggiano, A. Puccini, C. Rossi Alvarez, V. Strati, G. Xhixha & A. Zanon; *Uranium distribution in the Variscan Basement of Northeastern Sardinia* (2016); Journal of Maps, Volume 12, 2016 - Issue 5; https://doi.org/10.1080/17445647.2015.1115784

- Strati, V., Baldoncini, M., Bezzon, G.P., Broggini, C., Buso, G.P., Caciolli, A., Callegari, I., Carmignani, L., Colonna, T., Fiorentini, G., Guastaldi, E., Kaçeli Xhixha, M., Mantovani, F., Menegazzo, R., **Mou, L.**, Rossi Alvarez, C., Xhixha, G., Zanon, A.; *Total natural radioactivity, Veneto (Italy)* (2015); Journal of Maps, Volume 11, 2015 - Issue 4, Pages 545-551; https://doi.org/10.1080/17445647.2014.923348

- Guastaldi, E., Baldoncini, M., Bezzon, G., Broggini, C., Buso, G., Caciolli, A., Carmignani, L., Callegari, I., Colonna, T., Dule, K., Fiorentini, G., Kaçeli Xhixha, M., Mantovani, F., Massa, G., Menegazzo, R., **Mou, L.**, Rossi Alvarez, C., Strati, V., Xhixha, G., Zanon, A.; *A multivariate spatial interpolation of airborne γ-ray data using the geological constraints* (2013); Remote Sensing of Environment, Volume 137, Pages 1-11; 10.1016/j.rse.2013.05.027

- Xhixha, G., Ahmeti, A., Bezzon, G.P., Bitri, M., Broggini, C., Buso, G.P., Caciolli, A., Callegari, I., Cfarku, F., Colonna, T., Fiorentini, G., Guastaldi, E., Mantovani, F., Massa, G., Menegazzo, R., **Mou, L.**, Prifti, D., Rossi Alvarez, C., Kuqi, D.S., Shyti, M., Tushe, L., Xhixha Kaçeli, M., Zyfi, A.; *First characterisation of natural radioactivity in building materials manufactured in Albania* (2013); Radiation Protection Dosimetry, Volume 155, Issue 2, Pages 217–223; 10.1093/rpd/ncs334

- Xhixha, G., Bezzon, G.P., Broggini, C., Buso, G.P., Caciolli, A., Callegari, I., De Bianchi, S., Fiorentini, G., Guastaldi, E., Kaçeli Xhixha, M., Mantovani, F., Massa, G., Menegazzo, R., **Mou, L.**, Pasquini, A., Alvarez, C.R., Shyti, M.; *The worldwide NORM production and a fully automated gamma-ray spectrometer for their characterization* (2013); Journal of Radioanalytical and Nuclear Chemistry, 295, pages 445–457; 10.1007/s10967-012-1791-1

- Callegari, I., Bezzon, G.P., Broggini, C., Buso, G.P., Caciolli, A., Carmignani, L., Colonna, T., Fiorentini, G., Guastaldi, E., Xhixha, M.K., Mantovani, F., Massa, G., Menegazzo, R., **Mou, L.**, Pirro, A., Alvarez, C.R., Strati, V., Xhixha, G., Zanon, A.; *Total natural radioactivity, Tuscany, Italy* (2013); Journal of Maps, Volume 9, 2013 - Issue 3, Pages 438-443; https://doi.org/10.1080/17445647.2013.802999

- Caciolli, A., Baldoncini, M., Bezzon, G.P., Broggini, C., Buso, G.P., Callegari, I., Colonna, T., Fiorentini, G., Guastaldi, E., Mantovani, F., Massa, G., Menegazzo, R., **Mou, L.**, Alvarez, C.R., Shyti, M., Zanon, A., Xhixha, G.*; A new FSA approach for in situ γ ray spectroscopy* (2012); Science of the Total Environment, Volume 414, 1, Pages 639-645; https://doi.org/10.1016/j.scitotenv.2011.10.071

International Atomic Energy Agency (IAEA) reports

2019. Report Technical Meeting IAEA on “Nuclear Data for Medical Applications”
The summary report is available as https://www-nds.iaea.org/publications/indc/indc-nds-0776-final.pdf
The Italian contribution report, signed by Ms G. Pupillo and Ms **L. Mou**, is reported at pp. 14

2019. Report 3rd Meeting IAEA of the CRP No. F22053 (67Cu, 186Re, 47Sc)
In the first part of the document there is a general description of the common research activities for all the radionuclides of interest (67Cu, 186Re, 47Sc) and the collaborations among the Participants; in the second part of the document there is a collection of the Country reports. The Italian Country report, signed by Ms G. Pupillo, Ms **L. Mou** and Ms P. Martini, is reported at pp. 145-164

2018. Report 2nd Meeting IAEA of the CRP No. F22053 (67Cu, 186Re, 47Sc)
In the first part of the document there is a general description of the common research activities for all the radionuclides of interest (67Cu, 186Re, 47Sc), the planned activities for the future year and collaborations among the Participants; in the second part of the document there is a collection of the Country reports. The Italian Country report, signed by Ms G. Pupillo and Ms **L. Mou**, is reported at pp. 143-149

2016. Report 1st Meeting IAEA of the CRP No. F22053 (67Cu, 186Re, 47Sc):
In the first part of the document there is a general description of the future common research activities for all the radionuclides of interest (67Cu, 186Re, 47Sc) and guidelines for the Participants; in the second part of the document there is a collection of the Country reports. The Italian Country report, signed by Ms G. Pupillo and Ms **L. Mou**, is reported at pp. 41-45

Event organization

2nd RCM of the IAEA Radioisotope Production and Radiation Technology Section CRP (F22053), INFN-LNL, Legnaro (PD), Italy, 5-9 March 2018

Presentations (oral and poster) and proceedings

EANM20 virtual congress, 22-30 October 2020
P. Martini et al., *Cyclotron-Production of 51/52Mn Isotopes: an Update on the METRICS Project* (e-poster)

VIII Congresso nazionale GICR, Padova, Italy, 18-19 September 2020.
- P. Martini et al., *A comparison of separation and purification strategies for 51/52Mn cyclotron production* (poster)
- L. De Nardo et al., *Dosimetric analysis of the contribution of Radioisotopes Coproduced through natV(p,x)47Sc reaction route in Cyclotron Irradiation* (poster)

SIF2020, 106° Congresso Nazionale, 14-18 September 2020:
L. De Dominicis et al., *Cross-section measurements of alpha induced nuclear reactions on natCd and natIn target for the theranostic ^{117m}Sn production*; on-line recorded presentation (https://agenda.infn.it/event/23656/contributions/120616/) and Winner presentation as "Migliori Comunicazioni" of the 106° SIF Congresso Nazionale 2020

ENSAR2, Town Meeting 2, Athens, Greece, 10-14 February 2020:
L. De Dominicis et al., Cross-sections measurements for production of ^{117m}Sn and its contaminants in reactions induced by alpha particles on natCd and ^{nat}In targets (poster)

XIII LANSPA 2020, 20-24 January 2020, San José, Costa Rica:
G. Pupillo et al., *The LARAMED project at INFN-LNL* (oral)

10th ICI (2020) AIP
Pupillo, P. Antonini, M. Calderolla, A. Calore, D. Bettoni, A. Boschi, S. Cisternino, A. Duatti, F. Evangelisti, P. Favaron, G. Fiorentini, F. Gramegna, G. Keppel, M. Maggiore, P. Martini, **L. Mou**, M. Pasquali, L. Pranovi, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca, H. Skliarova and J. Esposito, *The Laramed Project at LNL: 67Cu and 47Sc Production for Theranostic Applications*; (Conference Proceedings 2295, 020001, https://doi.org/10.1063/5.0032898G)
INTERNATIONAL SYMPOSIUM ON TRENDS IN RADIOPHARMACEUTICALS 28 October 2019 to 1 November 2019, Vienna International Centre
- G. Pupillo, Accelerator-based production of Sc-47: Results of the PASTA project (oral)
- P. Martini et al., Towards large-scale ^{67}Cu cyclotron-production (oral)
- **L. Mou** et al., *The LARAMED project at INFN-LNL: Laboratory of Radionuclides for MEDicine* (poster)
- M. Pasquali et al., *Towards multimodal PET/MRI imaging with cyclotron-produced $^{52/51}$Mn* (poster)
- A. Boschi et al.; *Technetium-99m production by medical cyclotron* (poster)

- H. Skliarova et al., *High energy vibrational powder plating for cyclotron solid target preparation for radiopharmaceuticals production* (poster)
- L. Canton et al., *Nuclear reaction calculations applied to cyclotron production of emerging radiopharmaceuticals* (poster)

Congresso SIF, l'Aquila, 23-27 Settembre 2019:

G. Pupillo et al., *Il progetto PASTA - Production with Accelerator of Sc-47 for Theranostic Applications* (oral)

LIA COLL-AGAIN, COPIGAL, and POLITA Workshop March 5 - 7, 2019, HIL Warsaw, Poland

- **L. Mou** et al., *The PASTA project: Production with Accelerator of Sc-47 for Theranostic Applications* (poster)
- G. Pupillo et al., The Laramed project at LNL: Radionuclides from the nuclear physics to medicine (oral)

2nd International Conference on Radioanalytical and Nuclear Chemistry (RANC 2019), Budapest, Hungary, May 5–10, 2019.

- G. Pupillo, A. Boschi, L. Canton, S. Cisternino, A. Duatti, J. Esposito, A. Fontana, F. Haddad, P. Martini, **L. Mou**, M. Pasquali, H. Skliarova; *Production of ^{47}Sc with natural Vanadium targets: results of the PASTA project*. (oral)
- G. Pupillo, P. Antonini, S. Cisternino, J. Esposito, **L. Mou**, L. Pranovi, C. Rossi Alvarez, H. Skliarova. *Realization of metallic Ti-48 enriched targets for the PASTA project.* (poster)

15th Int Conf on nuclear reaction mechanisms (Varenna). 2019; 341-348

- G. Pupillo, **L. Mou** et al. *Cyclotron-based production of the theranostic radionuclides 67Cu and 47Sc*. (Conference Proceedings)
- G. Pupillo et al., Cyclotron-based production of the theranostic radionuclides ^{67}Cu and ^{47}Sc (oral)
- Fontana A. et al., Challenges in the modeling of nuclear reactions for theranostic applications (oral)

Symposium on Technetium and Other Radiometals in Chemistry and Medicine (TERACHEM 2018), Bressanone (BZ), Italy, September 26-29, 2018

- Boschi, P. Martini*, G. Cicoria, M. Marengo, L. Uccelli, M. Pasquali, M. Giganti, G. Pupillo, **L. Mou**, C. Rossi Alvarez, H. Skliarova, S. Cisternino, A. Duatti, J. Esposito. *A Remotely Controlled Module for an in-Hospital Routine Production of Tc-99m by Medical Cyclotrons* (poster)
- P. Martini*, A. Boschi, S. Cisternino, J. Esposito, G. Fiorentini, G. Keppel, **L. Mou**, M. Pasquali, G. Pupillo, C. Rossi Alvarez, H. Skliarova, G. Sciacca, L. Uccelli, A. Duatti, D. Bettoni. *LARAMED: a LAboratoty of RAdioisotopes for MEDicine* (poster)

European Nuclear Physics Conference (Bologna, 2-7 September 2018):

G. Pupillo et al., *Nuclear cross section measurements of the theranostic radionuclide Sc-47: Preliminary results of the PASTA project* (oral)

41st European Cyclotron Progress Meeting, Dubna, Russia, September, 3-5 2018

H. Skliarova, S. Cisternino, L. Pranovi, P. Antonini*, G. Pupillo, **L. Mou**, J. Esposito, C. Rossi Alvarez**;** *High energy VIbrationalPowder Plating for cyclotron target deposition* (poster)

European Nuclear Physics Conference, Bologna, Italy, September, 2-7 2018

G Pupillo, A. Fontana, L. Canton, F. Haddad, H. Skliarova, S. Cisternino, P. Martini, M. Pasquali, A. Boschi, J. Esposito, A. Duatti, **L. Mou**; Nuclear Cross Section Measurements of the TheranosticRadionuclide Sc-47: Preliminary Results of the PASTA Project (oral & proceeding)

17th Workshop on Targetry and Target Chemistry (WTTC17), Coimbra, Portugal, August 27-31 2018

P. Martini, A. Boschi, L. Uccelli, M. Pasquali, A. Duatti, H. Skliarova*, S. Cisternino, G. Pupillo, **L. Mou**, G. Di Domenico, M. Loriggiola, G. Cicoria, F. Zagni, A. Corazza, M. Marengo, S. Carturan, M. Bello, N. Uzunov, C. Rossi Alvarez, A. Zanon, P. Buso, G. Bezzon, J. Esposito; *Achievements of TECHN-OSP project: TECHNetium direct-production in hOSPital* (poster)

VII Congresso Nazionale del Gruppo Interdisciplinare di Chimica dei Radiofarmaci, Ferrara, Italy May,11-12 2018

- P. Martini et al, *Direct production of Technetium-99m by medical cyclotron*. (poster)
- G. Pupillo et al., La produzione di Cu-67 con ciclotrone presso INFN-LNL (poster)

LASNPA-WONP-NURT 2017 - In Nucleus review No 62:

- G. Pupillo et al. *Cyclotron production of ^{67}Cu: A new measurement of the ^{68}Zn(p,2p)^{67}Cu, ^{68}Zn(p,2n)^{67}Ga and ^{68}Zn(p,3n)^{66}Ga nuclear cross sections* (oral)

- A. Fontana et al., *The modelling of reaction cross sections in the production of theranostic radionuclides* (oral)

III Latin American Meeting on Radiopharmaceuticals, inside the XXVI ALASBIMN Congress (Asociación Latinoamericanade Sociedadesde Biologíay), Santiago de Chile, Chile, November 23-26, 2017

J. Esposito, G. Pupillo, **L. Mou**, M. Pasquali, P. Martini, C. Rossi Alvarez, H. Skliarova, S. Cisternino, M. Gobbo, G. Keppel, V. Palmieri, G. Fiorentini A. Duatti; *A simple and self-implementing system for in-house Tc-99m cyclotron production* (oral)

9th International Conference on Isotopes & Expo Prospectus, Doha, Qatar, November 12-16 2017

J. Esposito, G. Pupillo, **L. Mou**, M. Pasquali, P. Martini, C. Rossi Alvarez, H. Skliarova, S. Cisternino, M. Gobbo, G. Keppel, V. Palmieri, G. Fiorentini A. Duatti; *LARAMED: A New High-Energy Cyclotron Facility for the Production of Unprecedented Radionuclides for Medicine* (oral)

MCMA 2917, Napoli, 15-18 october 2017

Fontana A., Pupillo G., Mou L., Rossi Alvarez C., Esposito J., Canton L.; *Montecarlo calculation of reaction cross sections for the production of innovative radionuclides* (poster)

40th European Cyclotron Progress Meeting, Legnaro, Italy, September 20-23 2017

- J. Esposito, G. Pupillo, V. Palmieri, G. Fiorentini, A. Duatti, **L. Mou**, M. Pasquali, P. Martini, C. Rossi Alvarez, H. Skliarova, S. Cisternino, M. Gobbo, G. Keppel; *LARAMED – LAboratory of RAdionuclides for MEDicine: Status of the research facility at INFN LNL,* oral in the Session 4 – FRI41, book of abstracts: page 2.
- P. Martini*, A. Boschi, C. Rossi Alvarez, J. Esposito, G. Cicoria, Z. Federico, A. Corazza, L. Uccelli, M. Pasquali, A. Duatti, G. Pupillo, M. Marengo, M. Loriggiola, H. Skliarova, **L. Mou**, S. Cisternino, S. Carturan, L. Melendez-Alafort, N. Uzunov, M. Bello. High quality Technetium-99m by medical cyclotrons; Poster session - POS06, book of abstracts: page 21.

Congresso SIF 2016 (PD):

G. Pupillo, **L. Mou*** et al., *Optimized ^{67}Cu production by using thick ^{68}Zn targets* (oral)

18a Conferenza Nazionale ASITA, 14 – 16 ottobre 2014, Firenze

E. Tufarolo, M. Baldoncini, G.P. Bezzon, F.N. Antonio Brogna, G.P. Buso, I. Callegari, L. Carmignani, T. Colonna, G. Fiorentini, E. Guastaldi, M.K. Xhixha, F. Mantovani, **L. Mou**, C. Pagotto, E. Realini, M. Reguzzoni, C.R. Alvarez, R. Salvini, D. Sampietro, V. Strati, G. Xhixa, A. Zanon; *Il Radgyro: un autogiro dedicato ad acquisizioni airborne multiparametriche.* (Atti 18a Conferenza Nazionale ASITA)

International Joint Conference RADIO 2014, Gramado, RS, Brazil, August, 26-29, 2014

G. Burgada, M.A.G. Alvarez, M. Baldoncini, P. Garosi, A. Iovene,F. Mantovani, **L. Mou**, S. Petrucci, C. Rossi Alvarez, V. Strati, C. Tintori, G. Xhixha; *A segmented detector for airborne gamma ray spectroscopy*; https://inis.iaea.org/collection/NCLCollectionStore/_Public/46/029/46029476.pdf (conference paper)

NORM & Environmental Radioactivity 2014

M. Xhixha, M. Baldoncini, G.P. Bezzon, G.P. Buso, L. Carmignani, L. Casini, I. Callegari, T. Colonna, S. Cuccuru, E. Guastaldi, G.Fiorentini, F. Mantovani, G. Massa, **L. Mou**, G. Oggiano, A.Puccini, C. Rossi Alvarez, V. Strati, G. Xhixha, A. Zanon; *A Detailed Gamma-ray Survey for Estimating the Radiogenic Power of Sardinian Variscan Crust* (conference paper)

7th International Conference on Environmental and Geological Science and Engineering (EG '14), At Salerno, Italy, 2014

G. Xhixha, M. Baldoncini, G. Bezzon, G. Buso, I. Callegari, T. Colonna, G. Fiorentini, G. Gjeta, M. Goga, E. Guastaldi, F. Hasani, F. Mantovani, **L. Mou**, C.R. Alvarez, V. Strati, M. Xhixha Kaçeli, A. Zanon; *Assessment of Naturally Occurring Radioactive Materials (NORMs) in soils from the Kuçova oilfield, Albania* (conference proceedings)

Goldschmidt 2013 (Firenze 2013)

- Guastaldi E, Baldoncini M, Bezzon G, Broggini C, Buso GP, Caciolli A, Callegari I, Colonna T, Fiorentini G, Kaçeli Xhixha M, Mantovani F, Massa G, Menegazzo R, **Mou L**, Rossi Alvarez C, Strati V, & Xhixha G. *Mapping the natural radioactivity of Elba Island by means of geostatistical interpolation of airborne gamma-ray data.* (conference proceeding; Mineralogical Magazine, 77(5) 1224 (2013))
- Xhixha G, Bezzon G, Broggini C, Buso GP, Caciolli A, Callegari I, Colonna T, Fiorentini G, Guastaldi E, Kaçeli Xhixha M, Mantovani F, Massa G, Menegazzo R, **Mou L**, Rossi Alvarez C & Strati V. *Automated -ray spectrometer for monitoring wastes made by non-nuclear industries.* (conference proceeding; Mineralogical Magazine, 77(5) 2519 (2013))

Conference: International Conference of Ecosystems (ICE), At Tirana, Albania, 2013
G. Xhixha, A. Ahmeti, G.P. Bezzon, M. Bitri, C. Broggini, G. Buso, A. Caciolli, I. Callegari, F. Cfarku, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C.R. Alvarez, D. Sadiraj Kuqi, M. Shyti, V. Strati, M. Xhixha Kaçeli, P. Zdruli, A. Zyfi; *Natural radioactivity in chemical fertilizers used in aAbania investigated with a fully automated gamma-ray spectrometer* (conference paper)

IX Conference on Geostatistic for Environmental Applications, geoENV2012 (Valencia, 2012)
Guastaldi E, G.P. Bezzon, C. Broggini, G.P. Buso., A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, G. Xhixha, and A. Zanon. *Integrating of airborne gamma-ray survey and geological data for environmental radioactivity map construction.* (Conference proceeding 2012, pp. 137-144)

Workshop di Geofisica, December 2012, Rovereto (TN)
Virginia Strati et al. "*Studio preliminare del contenuto di radioattività delle principali formazioni rocciose delle aree alpine, prealpine e collinari della Regione Veneto* (poster and Conference proceedings 2013)

Conference: Age conferenze, Iglesias (Italy), 2011
Antonio Puccini, Stefano Cuccuru, Giacomo Oggiano, Fabio Mantovani, Gerti Xhixha, **Liliana Mou** & Carlo Rossi Alvarez; Measurements of natural radioactivity with a portable gamma-ray spectrometer in Sardinian granite dimension stones (conference paper)

Workshop di Geofisica, December 2010, Rovereto (TN)
Liliana Mou et al. "*Nuovo spettrometro gamma per il monitoraggio della radioattività in situ*" (oral and Conference proceedings 2011; 59-72)

Participation to congresses, conferences, meetings and international schools

CoViD-19: Inflammation and Molecular Imaging – Remote, 20-23 May 2021

III RCM IAEA "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (^{67}Cu, ^{186}Re, ^{47}Sc)" - IAEA (Vienna), 4-8 November 2019

International Symposium on Trends in Radiopharmaceuticals (ISTR-2019) - IAEA (Vienna) 28 October - 1 November 2019

1 day seminar on Cu67 - LNL-COLL-AGAIN collaboration 10-07-2019

"MEDICIS – the facility, the collaboration, past and future operation" LNL-INFN 4-6-2019

LIA COLL-AGAIN, COPIGAL, and POLITA Workshop - HIL Warsaw (Poland), 5-7 March 2019

"Technical Meeting on Nuclear Data for Medical Applications" - IAEA (Vienna) 10-13 December 2018

"La Medicina Nucleare: Rivoluzione nella diagnostica e nella terapia" - IOV Padova, 24/09/2018

II RCM IAEA on "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (^{67}Cu, ^{186}Re, ^{47}Sc)" 5-9 March 2018 - Legnaro (Italy)

15th International Conference in Nuclear Reaction Mechanisms - Varenna (Italy), 11-15 June 2018

VII national congress GICR - Ferrara (Italy), 11-12 May 2018

"Dai radionuclidi ai radiofarmaci: La fisica nucleare incontra la radiofarmacia" - INFN-LNL, 13/04/2018

III RCM IAEA "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (^{67}Cu, ^{186}Re, ^{47}Sc)" - INFN-LNL, 5-9 March 2018

Workshop "Isolpharm/isolpharm-ag" - Dip.to Chimica del farmaco UniPD - 1/12/2017

LANSPA & WONP-NURT 2017 - Havana (Cuba), October 23-27, 2017

III School of Medical Physics - Havana (Cuba), 23-27 Ottobre, 2017

40th European Cyclotron Progress Meeting – LNL, 20-23 September 2017

MEDICIS Summer School on PET aided adron therapy, Fondazione CNAO - Pavia, 4-9 June 2017

NEA Workshop on the Management of Non-Nuclear Radioactive Waste - LNL 2-4 May 2017

VII International Course ""Detector and Electronics for High Energy Physics, Astrophysics, Space Applications and Medical Physics" - LNL-INFN, Legnaro, Padova, 3-7 April 2017

Terzo Incontro Nazionale di Fisica Nucleare – INFN2016, LNF, 14-16 November 2016

I RCM IAEA on "Therapeutic Radiopharmaceuticals Labelled with New Emerging Radionuclides (^{67}Cu, ^{186}Re, ^{47}Sc)" Vienna (Austria), 5-9 September 2016

Workshop di Geofisica, December 2012, Rovereto

Workshop di Geofisica, December 2011, Rovereto

INFN-LNL Annual Report

Annual Report 2020

- **L. Mou**, L. De Dominicis, G. Pupillo; *The PASTA Project: Measurements of the natV(p,x)^{48}Sc, ^{48}Cr, ^{49}Cr, ^{51}Cr, ^{48}V, ^{42}K*
- L. De Nardo, G. Pupillo, **L. Mou**, J. Esposito, A. Rosato, L. Melendez-Alafort; *Therapeutic Application of a Mixture of 64/67Cu Radioisotopes.*
- L. De Dominicis, F. Barbaro, L. Canton, M. P. Carante, A. Colombi, A. Fontana, **L. Mou**, G. Pupillo, A. Stolarz, P. J. Napiorkowski; *The ^{117m}Sn Production Cross Section Measurements*
- G. Sciacca, G. Pupillo, **L. Mou**, J. Esposito; *Status of the LARAMED Beam Dump Design for the Nuclear Cross Section Measurement Apparatus*
- S. Cisternino, C. Gennari, I. Calliari, J. Esposito, M. Campostrini, **L. Mou**, G. Pupillo, V. Rigato; *Solid Targets Characterization for Nuclear Cross-Section Measurements and Radioisotopes Production*
- **L. Mou**, L. De Dominicis, G. Pupillo; *Measurements of the PASTA Project: The Case of natV(p,x)44mSc,44gSc Cross Sections*
- J. Esposito, P. Antonini, A. Calore, S. Cisternino, A. Duatti, F. Evangelisti, P. Favaron, G. Fiorentini, G. Keppel, P. Martini, M. Maggiore, **L. Mou**, M. Pasquali, L. Pranovi, G. Pupillo, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca; *LARAMED Facility Status Report*
- P. Martini, A. Boschi, E. Cazzola, S. Cisternino, A. Duatti, G. Gorgoni, L. Marvelli, M. Pasquali, **L. Mou**, G. Pupillo, C. Rossi Alvarez, G. Sciacca, J. Amico, L. Uccelli, J. Esposito; *Cyclotron-Production of 51/52Mn Isotopes: An Update on the METRICS Project*
- L. Melendez-Alafort, G. Pupillo, **L. Mou**, J. Esposito, A. Rosato and L. De Nardo; *Assessment of surviving fraction of prostate cancer cells after a treatment with $^{64/67}CuCl_2$*

Annual Report 2019

- F. Barbaro, L. De Dominicis, L. Canton, M.P. Carante, A. Colombi, A. Fontana, **L. Mou**, G. Pupillo, A. Stolarz; *The Theranostic ^{117m}Sn: Theoretical Study for an ENSAR2 Production Experiment with a 30 MeV α-beam at the HIL U-200P Cyclotron in Warsaw*
- **L. Mou**, L. De Dominicis, S. Calzaferri, L. Canton, A. Fontana, J. Esposito, G. Pupillo; *PASTA Project Results on the Theranostic 47Sc Production with natV Targets*
- L. De Dominicis, L. Canton, A. Fontana, F. Haddad, **L. Mou**, G. Pupillo; *New Cross Section Values of the ^{nat}V(p,x)^{43}Sc Reaction*
- J. Esposito, P. Antonini, A. Boschi, M. Calderolla, S. Cisternino, A. Duatti, P. Favaron, G. Fiorentini, G. Keppel, P. Martini, M. Maggiore, **L. Mou**, M. Pasquali, L. Pranovi, G. Pupillo, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca, H. Skliarova; *LARAMED Facility status report at LNL*
- L. De Nardo, D. Furlanetto, G. Pupillo, **L. Mou**, J. Esposito, L. Meléndez-Alafort; *Analysis of the Dosimetric Contribution of Radionuclides Coproduced through ^{nat}V(p,x)^{47}Sc Cyclotron Irradiation*
- P. Antonini, M. Campostrini, S. Cisternino, P. Facco, L. Mou, L. Pranovi, G. Pupillo, V. Rigato, C. Rossi Alvarez, G. Sciacca, H. Skliarova, L. Taffarello; *"E-PLATE: Electrostatic Powders pLating for Accelerator TargEt" project status report*

Annual Report 2018

- J. Esposito, P. Antonini, M. Calderolla, S. Cisternino, A. Duatti, P. Favaron, G. Fiorentini, G. Keppel, P. Martini, M. Maggiore, **L. Mou**, M. Pasquali, L. Pranovi, G. Pupillo, C. Rossi Alvarez, L. Sarchiapone, G. Sciacca, H. Skliarova; *The LARAMED Facility Status*
- P. Martini, A. Boschi, M. Pasquali, **L. Mou**, H. Skliarova, S. Cisternino, J. Esposito, L. Canton, A. Fontana, C. Rossi Alvarez, A. Duatti, G. Pupillo; *PASTA project: optimization of a radiochemical separation of Sc from Ti*
- **L. Mou**, H. Skliarova, S. Cisternino, J. Esposito, L. Canton, A. Fontana, P. Martini, M. Pasquali, A. Boschi, L. De Dominicis, C. Rossi Alvarez, A. Duatti and G. Pupillo; *PASTA Project: Data Analysis*
- J. Esposito, E. Cazzola, S. Cisternino, G. Gorgoni, **L. Mou**, G. Pupillo, H. Skliarova; *First experimental outcomes on target irradiation tests for Mn52 production in METRICS research project*
- **L. Mou**, P. Martini, M. Pasquali, J. Esposito, C. Rossi Alvarez, A. Duatti and G. Pupillo; *A method and a target to produce ^{67}Cu*
- S. Calzaferri, L. Canton, M. Carante, A. Fontana, **L. Mou**, G. Pupillo; *"Cooking" Nuclear Reactions for the PASTA Project*

Annual Report 2017

- G. Pupillo, **L. Mou**, P. Martini, M. Pasquali, C. Rossi Alvarez, M. Loriggiola, J. Esposito, S. Carturan, S. Canella, A. Duatti; *Results of the COME – COpper MEasurement project*
- L. De Nardo, A. Lucchetti, G. Pupillo, **L. Mou**, J. Esposito, L. Meléndez-Alafort; *Dosimetric Evaluation after Administration of Radiopharmaceuticals Containing Copper Radioisotopes*
- G. Pupillo, **L. Mou**, H. Skliarova, S. Cisternino, J. Esposito, L. Canton, A. Fontana, P. Martini, M. Pasquali, A. Boschi, C. Rossi Alvarez, A. Duatti; *PASTA Project: Production with Accelerator of Sc ‑47 for Theranostic Applications*
- J. Esposito, G. Keppel, G. Pupillo, **L. Mou**, M. Pasquali, P. Martini, M. Gobbo, M. Calderolla, P. Favaron, H. Skliarova, S. Cisternino, L. Sarchiapone, A. Boschi, M. Maggiore, C. Rossi Alvarez, G. Fiorentini, A. Duatti; *Progress of the LARAMED Project*

Annual Report 2016

- G. Pupillo, **L. Mou**, P. Martini, M. Pasquali, C. Rossi Alvarez, J. Esposito, S. Carturan, S. Canella, A. Duatti; *COME – COpper MEasurement project*
- P. Martini, A. Boschi, G. Cicoria, G. Pupillo, **L. Mou**, C. Rossi Alvarez, M. Pasquali, S. Carturan, S. Canella, J. Esposito, L. Uccelli, A. Duatti; *Radiochemical Procedure for 67Cu Production from Zinc Target*

Annual Report 2014

- A. Caciolli, C. Broggini, R. Depalo, M. La Cognata, L. Lamia, R. Menegazzo, A. Tumino, **L. Mou**, V. Rigato, S. Romano, C. Rossi Alvarez, L. Sergi, C. Spitaleri, S. M. R. Puglia; *$^{10}B(p,\alpha)^{7}Be$ Study With the Activation Method by Using the AN2000 Accelerator*

Annual Report 2013

- V. Strati, M. Baldoncini, G.P. Bezzon, C. Broggini, G. P. Buso, A. Caciolli, I. Callegari, L. Carmignani, T. Colonna, G. Fiorentini, E. Guastaldi, M. Kaçeli Xhixha, F. Mantovani, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, G. Xhixha, A. Zanon; *Total natural radioactivity map of Veneto (Italy)*

Annual Report 2012

- G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, M. Kac¸eli Xhixha, G. Xhixha, A. Zanon; *Soil Isotopic abundances reconstructed by using simulated spectra*
- G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, M. Kaçeli Xhixha,G. Xhixha, A. Zanon; *Monte Carlo simulation to describe airborne survey effects*
- G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, M. Kaçeli Xhixha,G. Xhixha, A. Zanon; *First flight test on Elba Island for Airborne γ-ray Survey System developed at LNL*

Annual Report 2011

- G. Xhixha, G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, M. Kaçeli Xhixha, A. Zanon. *Airborne γ-Ray Survey System Developed at LNL*
- **L. Mou**, G. P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, C. Rossi Alvarez, M. Shyti, G. Xhixha, M. Kaçeli Xhixha, A. Zanon. *Mapping of Natural Radioelements Using γ-Ray Spectrometry: Veneto Region Case of Study*
- A. Caciolli, G. Bezzon, G. Buso, C. Broggini, I. Callegari, T. Colonna, G. Fiorentini, E. Guastaldi, F. Mantovani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, G. Xhixha, M. K. Xhixha, A. Zanon; *The Non Negative Least Square Applied to the Full Spectrum Analysis*

Annual Report 2010

- G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, F. Mantovani, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, G. Xhixha, A. Zanon. *A γ-Spectroscopy System for Atmospheric Radon Detection*
- G.P. Bezzon, G.P. Buso, C. Broggini, A. Caciolli, I. Callegari, T. Colonna, E. Guastaldi, F. Mantovani, S. Mariani, G. Massa, R. Menegazzo, **L. Mou**, C. Rossi Alvarez, M. Shyti, G. Xhixha; *Mapping of Natural Radioelements Using Gamma-Ray Spectrometry: Tuscany Region Case of Study*

Reviewer activities

Reviewer for the journal MDPI (2021)

MEMBERSHIPS

Scientific societies

Società Italiana di Fisica S.I.F. (2016)

TEACHING ACTIVITIES

Teaching activity

Co-tutor Master thesis in nuclear physics entitled: Proton-induced cross sections on ^{nat}V target: focus on ^{47}Sc production, Bologna University (A.A. 2018-2019), Tutor: Prof. M. Bruno, Co-tutor: G. Pupillo, **L. Mou**; Student: L. De Dominicis

A.A. 2013-2014: Teacher of "Master di II livello in Risparmio energetico applicato agli edifici (REA-ENERGY) A.A. 2013-2014" for the course "Elementi di fisica applicati alla produzione di energia" for 24h at Centro di GeoTecnologie, Siena University

A.A. 2012-2013: Teacher of "Master di II livello in Risparmio energetico applicato agli edifici (REA-ENERGY) A.A. 2012-2013" for the course "Elementi di fisica applicati alla produzione di energia" for 24h at Centro di GeoTecnologie, Siena University

A.A. 2011/2012: Teacher of "Master di II livello in Geofisica Applicata A.A. 2011/2012" for the course "Fondamenti di fisica per la Geologia Applicata" for 24h at Centro di GeoTecnologie, Siena University

Scientific communication CC3M

Lesson for all the participants of the LNL Stage (two hours; 2021)
Title: Fisica multidisciplinare: nuclei per la salute

Lesson for all the participants of the LNL Stage (two hours; 2020)
Title: Fisica multidisciplinare: nuclei per la salute

Notte Europea della ricerca, Padova 2019

Pint of Science – (May 2019)
Title: Radioattivo ma non cattivo!!! La fisica nucleare al servizio della medicina
"Outreach-Radiolab. La ricerca a casa tua." - Padova 11 Maggio 2019

Notte Europea della ricerca, Padova 2018

Notte Europea della ricerca, Padova 2017

Tutor of the Nusmes project, "alternanza scuola-lavoro tra INFN-LNL e scuola IP Valle (PD)"; multimedia working group for the realization of a didactic video about the LARAMED project at INFN-LNL (2015-2016)

Notte Europea della ricerca, Padova 2016

Didactic seminar at the "Università popolare dell'età libera del Montello", Giavera del Montello (TV), (October, 2015)
Title: Nuclei per l'ambiente

Notte Europea della ricerca, Padova 2015

Seminar for "La scienza in un bicchiere", Castelfranco Veneto (May, 2014)
Title: La Radioattività intorno a noi

Seminar at the Liceo Scientifico A. Businco, Jerzu (Nu), (2014)
Title: Misure di Radioattività per uso civile

Tutor of the STAGE at LNL (two weeks; 2014)
Title: La radioattività che ci circonda

Notte Europea della ricerca, Padova 2014

Tutor of the STAGE at LNL (two weeks; 2013)
Title: Misure di radioattività ambientale

Tutor of the STAGE at LNL (two weeks; 2012)
Title: Misure di radioattività ambientale

ENGLISH TRAINING

October 2015 – January 2016	Attestato di frequenza, Centro Diffusione Lingue, Inglese 36 ore, livello B1.1
August 2015 – September 2015	Certificate of Studies, Malta Lingua (efl monitoring board), 60 lessons, level A2-B1
September 2012 – June 2013	English Language Course, Istituto linguistico Bertrand Russell, 150 h, level A2+

PERSONAL SKILLS

Communication skills

- Good scientific communication skills acquired through periodic exposure of the work to the research group and thanks to the teaching experience;
- active participation in national and international congresses, conferences and training programs.

Organizational skills

- Occupational independence Self-Organizing interdisciplinary work in advance, if necessary, discuss with colleagues;
- Working in teams, always looking to improve relations and to create harmony in the working group.

Computer skills

- Microsoft Office™, Origin, Gamma Vision® (ORTEC), MAESTRO-32, ArcGis

ANNEXES

- Evaluation of the PhD committee
- Certificate of the PhD achievement
- Certificate of the II level Master achievement
- Certificate of the master degree
- Certificate of the bachelor degree
- INFN Patent (cover page)
- REMiX project: WP2 responsibility
- Certificates of english courses attendance

DICHIARAZIONE SOSTITUTIVA DI CERTIFICAZIONE (art. 46 e 47 D.P.R. 445/2000)

- Il/La sottocritto/a, ai sensi e per gli effetti degli articoli 46 e 47 e consapevole delle sanzioni penali previste dall'articolo 76 del D.P.R. 28 dicembre 2000, n. 445 nelle ipotesi di falsità in atti e dichiarazione mendace, dichiara che le informazioni riportate nel presente curriculum vitae corrispondono a verità.

- Il/La sottoscritto/a dichiara di essere informato/a, ai sensi del d.lgs. n.196/2003 e del GDPR 679/16 – "Regolamento europeo sulla protezione dei dati personali" che i dati personali raccolti saranno trattati anche con strumenti informatici esclusivamente nell'ambito del procedimento per il quale la presente dichiarazione viene resa e per tutti gli adempimenti connessi.

Padova, July 29, 2021

Firmato: Liliana Mou