

# CURRICULUM VITAE



## PERSONAL INFORMATION

Surname and name

**MORALES GALLEGOS, ELIA LIZETH**

Year of birth

**1986**

E-mail

**moralessgallegos@na.infn.it**

Current position

Assistant Professor (RTD-A) Università degli Studi della Campania “Luigi Vanvitelli”

## EDUCATION

- Date
- Name and type of institute
- Qualification

2012-2017  
The University of Edinburgh, Scotland, UK  
Ph.D. in Nuclear Physics

- Date
- Name and type of institute
- Qualification

2005-2011  
Autonomous National University of Mexico (UNAM), Mexico City, MX  
Graduate diploma in Physics  
8.4/10

## WORK EXPERIENCE

- Date
- Name and address of the work place entity
- Type of company or institute
- Type of job
- Main responsibilities

2023 - current  
University of Campania “Luigi Vanvitelli”, Viale Abramo Lincoln n. 5 – 81100 Caserta (CE), Italy  
University  
**Assistant Professor (RTD-A)**  
Experiment KM3NeT. **LQS** (Local Quality Supervisor) of the CAPACITY (Campania AstroPARTICLE Infrastructure facility) laboratory, data analysis, coordination of the KM3NeT-HAWC (Italy-Mexico) collaboration, full-time teaching and outreach.

- Date
- Name and address of the work place entity
- Type of company or institute
- Type of job
- Main responsibilities

2021 - 2023  
National Italian Institute of Nuclear Physics (INFN), Strada Comunale Cinthia, 80126 Naples (NA), Italy  
Research Institute  
**Senior Postdoc Fellow**  
Experiment KM3NeT. **LQS** (Local Quality Supervisor) of the CAPACITY (Campania AstroPARTICLE Infrastructure facility) laboratory, data analysis and coordination of the KM3NeT-HAWC (Italy-Mexico) collaboration.

- Date
- Name and address of the work place entity
- Type of company or institute
- Type of job
- Main responsibilities

2018-2020  
University of Campania “Luigi Vanvitelli”, Viale Abramo Lincoln n. 5 – 81100 Caserta (CE), Italy  
University  
**Postdoc fellow**  
Nuclear Astrophysics research projects. Analysis and data taking, design of scientific instrumentation, writing of scientific papers, implantation of  $^7\text{Be}$  for the German company ZAG

- Date 2016-2017
- Name and address of the work place entity University of Campania “Luigi Vanvitelli”, Viale Abramo Lincoln n. 5 – 81100 Caserta (CE), Italy
- Type of company or institute University
- Type of job **Technical and scientific collaborator**
  - Main responsibilities Support activities for the service and upgrade of the mass recoil separator ERNA. Development of a H target for the  $^{23}\text{Na}(p,\alpha)^{20}\text{Ne}$
  
- Date 2014-2021
- Name and address of the work place entity University of Campania “Luigi Vanvitelli”, Viale Abramo Lincoln n. 5 – 81100 Caserta (CE), Italy
- Type of company or institute University
- Type of job **Teaching assistant**, “Physics Laboratory I” and “Physics Laboratory II”
  - Main responsibilities Lessons on data analysis
  
- Date 2012-2013
- Name and address of the work place entity The University of Edinburgh, School of Physics and Astronomy, James Clerk Maxwell Building, Peter Guthrie Tait Road, Edinburgh UK, EH9 3FD
- Type of company or institute University
- Type of job **Teaching assistant**, “Physics Laboratory I”, “Physics 1B LABS”, “Astronomy 1S”, “Dynamics”, “Physics 2B LABS”, “Maple” e “Dynamics and Vectorial Calculus”
  - Main responsibilities Exercises and grading of homework and tests
  
- Date (da – a) 2011-2012
- Name and address of the work place entity MIYMSA (Medidores Industriales y Medicos S.A.), América 181, Parque San Andrés, Coyoacán, 04030, Mexico City, MX
- Type of company or institute Medical and nuclear research area
- Type of job **Eng. of service of Nuclear Instrumentation**
  - Main responsibilities Maintenance, selling and repairing of nuclear instrumentation
  
- Date (da – a) 2010-2011
- Name and address of the work place entity Autonomous National University of Mexico (UNAM), Av Universidad 3000, Ciudad Universitaria, Coyoacán, 04510, Mexico City, MX
- Type of company or institute University
- Type of job **Teaching assistant** “Selected topics of Astrophysics”, “Maths for Biologists I” “Algebra for Physicists”
  - Main responsibilities Exercises and grading of homework and tests

MOTHER TONGUE	<b>Spanish</b>
OTHER LANGUAGES	<p><b>English</b> Excellent (C2) Excellent (C2) Excellent (C2)</p> <p><b>Italian</b> Excellent (C2) Good (C1) Excellent (C2)</p>
TECHNICAL SKILLS	<p>OS: Windows, MacOS and Linux (Ubuntu, RedHat and Scientific Linux).</p> <p>Software of data analysis such as ROOT, HEALPIX, numpy, healpy, Snakemake, tmux, etc.</p> <p>Programming in C, C++ and Python</p> <p>Technical design, artistic design, Wordpress for web design, optics software, MonteCarlo simulations, skymaps production, etc.</p> <p>Use of the pelletron tandem accelerator (CIRCE laboratory), charged particles detectors, electronics and acquisition systems, vacuum and gas systems, etc.</p>
ORGANISATIONAL AND MANAGERIAL SKILLS	<p>Webpage and social manager for KM3NeT Naples since 2022</p> <p>Organising committee of the XI Meeting of the Italian Groups of Experimental and Theoretical Nuclear Astrophysics. Caserta, Italy, October 2022</p> <p>Editor designer of the newsletter of GIANTS since 2020</p> <p>Organising committee of GIANTS (Italian Groups of Experimental and Theoretical Nuclear Astrophysics) since 2020</p> <p>Organiser of the internal seminar at CIRCE Laboratory "Caffè Scientifico" since 2019</p> <p>Organising committee and communication responsible of "European Researcher's Night", Caserta, 2016 – 2022</p> <p>Organising committee and communication responsible of "Science Unplugged", 2019</p> <p>Organising committee and communication responsible of "CIRCE open day", 2016 – 2022</p>
<i>Honours and awards</i>	<p>National Fellowship for foreigners in experimental Physics INFN, Italy 2020</p> <p>COST Short Term Scientific Mission, Edinburgh, UK 2018</p> <p>CoNaCyT for Ph.D. studies in Scotland, Edinburgh, UK 2012-2016</p> <p>CoNaCyT for undergrad studies, Mexico City, MX 2010</p> <p>Award Juan Manuel Lozano Mejia for Undergrad thesis, Mexico City, MX 2011</p>

## CONFERENCES

- 2022 – I Workshop CIR PACK. Bari, Italy, **Invited talks**
- 2022 - XI Meeting of the Italian Groups of Experimental and Theoretical Nuclear Astrophysics. Caserta, Italy, **Invited talk**
- 2022 – MidTerm Plan INFN – LNGS session. L'Aquila, Italia, Participant
- 2022 – *Nuclear Physics in Astrophysics - X*. Geneve, Switzerland & Online, Poster
- 2022 – *Topical Meeting of IReNA - FA1 and ChETEC-INFRA: Nuclear Reaction Measurements in Underground Laboratories*. Roma, Italy, **Invited talk**
- 2021 – *16th International Symposium on Nuclei in the Cosmos*. Chengdu, China & Online, Talk
- 2021 – ECT\* workshop – Key Reactions in Nuclear Astrophysics. Online, Participant
- 2020 – 106° National Congress of the Italian Society of Physics. Online, **Invited talk**
- 2020 – IReNA FA1 workshop on stellar burning. Online, Participant
- 2019 – X Meeting of the Italian Groups of Experimental and Theoretical Nuclear Astrophysics. Genova, Italy, **Invited talk**
- 2018 – *Nuclei in the Cosmos XV*. L'Aquila, Italia, Poster
- 2017 – IX Meeting of the Italian Groups of Experimental and Theoretical Nuclear Astrophysics. Bologna, Italy, **Invited talk**
- 2015 – SPES one day workshop “Nuclear Astrophysics at SPES”. Caserta, Italy, Participant
- 2015 – Nuclear Physics in Astrophysics VII conference. York, UK, Talk
- 2014 – 11th Russbach School on Nuclear Astrophysics. Russbach, Austria, Talk
- 2014 – XXXVII Symposium on Nuclear Physics. Cocoyoc, Mexico, **Invited talk**
- 2013 – The ECT\* JINA workshop: Reactions involving 12C: Nucleosynthesis and Stellar Evolution. Trento, Italy, Participant
- 2013 – Direct measurements in Nuclear Astrophysics with Recoil Mass separators, Inaugural workshop for ERNA at CIRCE. Caserta, Italy, Participant
- 2013 – 7<sup>th</sup> European Summer School on Experimental Nuclear Astrophysics. Catania, Italy, Talk
- 2011 – XXXIV Nuclear Physics Symposium. Cocoyoc, Mexico, Poster
- 2009 – LII National Physics Congress. Acapulco, Mexico, Poster
- 2002 – Second Bi-National congress of science (Mex-USA). Matamoros, Mexico, Organising committee