## EUROPEAN CURRICULUM VITAE FORMAT



#### **PERSONAL INFORMATION**

Surname(s) / First name(s)

Terzić / Tomislav

Address(es)

University of Rijeka, Faculty of Physics, Radmile Matejčić 2, 51000 Rijeka,

Croatia

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tterzic@.uniri.hr, tomislav.terzic@gmail.com, https://wrinkle.uniri.hr/tomislav-terzic/

Nationality(-ies)

Croatian

Date of birth

18.12.1978.

Identification number from Records of Scientific Workers

312710

#### **WORK EXPERIENCE**

Dates (from – to)

December 2022 - today

Name and address of employer

Faculty of Physics, University of Rijeka, Croatia

Occupation or position held

Associate Professor, Head of the Division for Theoretical Physics and Astrophysics

Main activities and responsibilities

- Research: astrophysics and astroparticle physics,

- Head of the Division for Theoretical Physics and Astrophysics,
- Teaching: physics,
- Science communication

Dates (from – to)

February 2017 – November 2022

Name and address of employer

Faculty of Physics, University of Rijeka, Croatia

Occupation or position held

Assistant Professor, Head of Laboratory for Astroparticle Physics (since Feb. 2018)

Main activities and responsibilities

- Research: astrophysics and astroparticle physics,
- Head of Laboratory for Astroparticle Physics
- Teaching: physics,
- Coordinator of the Astrophysics and Elementary Particle Physics Graduate Study Programme
- Science communication

Dates (from – to)

July 2015 - January 2017

Name and address of employer

Faculty of Physics, University of Rijeka, Croatia

Occupation or position held

Postdoctoral fellow

Main activities and responsibilities

Research (astrophysics), lecturing physics

• Dates (from – to)

December 2008 - July 2015

Name and address of employer

Faculty of Physics, University of Rijeka, Croatia

Occupation or position held Main activities and

Assistant

Main activities and responsibilities

Research (astrophysics), lecturing physics

Dates (from – to)
 Name and address of

employer

October 2007- January 2008

Elementary School Škurinje, Mihačeva draga 13, Rijeka

Occupation or position held	Physics teacher
Main activities and responsibilities	Physics
responsibilities	
<ul><li>Dates (from – to)</li></ul>	October 2007- December 2007
Name and address of	
employer	Elementary School Čavle, Čavle 212, Čavle
Occupation or position held	Physics teacher
Main activities and	Physics
responsibilities	Filysics
EDUCATION	
Date	2007
Place of education	Zagreb, Croatia
Name and type of organisation	-
providing education	Faculty of Science and Mathematics, University of Zagreb
Title or qualification awarded	Dipl. Ing. of physics (M.sc.)
	Dipl. ing. or physics (in.so.)
Date	2015
Place of education	Zagreb, Croatia
Name and type of organisation	
providing education	Faculty of Science and Mathematics, University of Zagreb
Title or qualification awarded	Dr. sc. in physics
TRAINING	
V	/· · · · · · · · · · · · · · · · ·
Year	2008 (1 week)
Place of training	Freudenstadt-Lauterbad, Germany
Name and type of organisation	Forschungszentrum Karlsruhe Institut fuer Kernphysik (Karlsruhe, Germany)
providing training Principal	CORSIKA school, Extensive air showers simulation using CORSIKA code
subjects/Occupational skills	CONSINA SCHOOL, Extensive all showers simulation using CONSINA code
covered	
Year	2009 (3 months)
Place of training	Munich, Germany
Name and type of organisation	Max Planck Institute for Physics (Werner Heisenberg Institute), Munich
providing training	
Principal subjects /	MAGIC telescope data analysis
Occupational skills covered	
Year	2000 (1 wook)
	2009 (1 week)
Place of training	La Palma, Spain
Name and type of organisation providing training	Centro Astrofisica de La Palma, Observatorio del Roque de los Muchachos, Instituto de Astrofísica de Canarias
Principal subjects /	MAGIC expert school, MAGIC experiment hardware and software for experts
Occupational skills covered	The state of the s
Year	2009 (10 days)
Place of training	Rabac, Croatia
Name and type of organisation	SISSA(Trieste, Italy), University of Rijeka – Faculty of Physics (Rijeka, Croatia)
providing training	
Principal subjects /	Summer School NOVICOSMO 2009: "Highlights in Astrophysics"
Occupational skills covered	
Year	2010 (1 wool)
	2010 (1 week)
Place of training	Bad Honnef, Germany

Name and type of organisation providing training	University of Bonn (Bonn, Germany)
Principal subjects /	Summer school "Evolution of galaxies and their large-scale environment"
Occupational skills covered	S S
Voor	0040 (4 1)
Year	2010 (1 week)
Place of training	Passo del Tonale, Italy University of Heidelberg (Heidelberg, Germany)
Name and type of organisation providing training	Oniversity of Heidelberg (Heidelberg, Germany)
Principal subjects /	Fourth TRR33 Winter School on Cosmology: "Theory for Observers,
Occupational skills covered	Observations for Theorists", inflation and non-Gaussianity, LHC Physics, large
	scale structure, weak lensing
Year	2012 (1 month)
Place of training	La Palma, Spain
Name and type of organisation	Observatorio del Roque de los Muchachos, (Instituto de Astrofísica de
providing training	Canarias)
Principal subjects /	MAGIC experiment upgrade
Occupational skills covered	
Year	2014 (1 week)
Place of training	Padova, Italy
Name and type of organisation	Dipartimento di Fisica ed Astronomia Padova
providing training	Ath MACIC Coffusions Cohool standard and man atomical MACIC data and
Principal subjects / Occupational skills covered	4th MAGIC Software School, standard and non-standard MAGIC data analysis
Occupational Skills Covered	
Year	2015
Place of training	Rijeka, Croatia
Name and type of organisation	Center for teacher education, Faculty of Humanities and Social Sciences,
providing training Principal subjects /	University of Rijeka  Programme "Teacher competencies in high education: Learning and teaching",
Occupational skills covered	basic knowledges and competencies for university teachers
·	-
Year	
Place of training	· •
Name and type of organisation providing training	The COST Academy, Brussels, Belgium
Principal subjects /	The COST Academy Leadership Workshop
Occupational skills covered	
	2000 2010 (0.1
Year	2009 - 2016 (8 observation shifts, total duration of 6 months)
Place of training  Name and type of organisation	La Palma, Spain  Observatorio del Roque de los Muchachos, (Instituto de Astrofísica de
providing training	Canarias)
Principal subjects /	MAGIC telescopes dana taking
Occupational skills covered	
PERSONAL SKILLS AND	
COMPETENCIES	
Mallagatanani	
Mother tongue(s)	Croatian
Other language(s)	
Circi language(3)	
Language	English
Speaking	Fluent
Writing	Fluent
Understanding (listening and	Fluent
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reading)	
Language	
Speaking	
Writing	Good
Understanding (listening and	Good
reading)	

#### SCIENTIFIC PROJECTS

- Hunt for the time delay in very high energy gamma rays from active galactic nuclei (AGN), 2010 2011, associate, DAAD MZOŠ
- Evaluation of possible sites and Monte Carlo studies for a future long term monitoring Cherenkov gamma-ray observatory in Croatia, 2010 - 2011, associate, DAAD – MZOŠ
- Very High Energy Gamma-Ray Astronomy With the MAGIC Telescopes,
   2012 2015, associate, HrZZ
- Studying the structure of the Universe using optical and Cherenkov telescopes – university support of University of Rijeka, 2013 - 2018, associate
- Participation of the University of Rijeka in international astroparticle experiments, 2014 - 2015, associate, University of Rijeka
- Very High Energy Gamma-Ray Astronomy With the MAGIC Telescopes and the CTA, 2017 2021, associate,  $\mbox{\rm HrZZ}$
- Optimizing the Cherenkov Telescope Array (CTA) for efficient observations of Active Galactic Nuclei, 2017 - 2018, associate, DAAD – MZO
- Studying the structure of the Universe using ground-based and satelliteborne telescopes University of Rijeka  $\,$  research grant, 2019 2021, associate
- COST Action CA18108 Quantum gravity phenomenology in the multimessenger approach (QG-MM), 2019 – 2023, associate, WG3 leader
- Search for signatures of quantum gravity in astrophysical measurements –
   University of Rijeka research grant, 2024 2025, PI
- COST Action CA23130 Bridging high and low energies in search of quantum gravity (BridgeQG), 2024 – 2028, associate, WG2 leader

#### **TEACHING**

## **Faculty of Medicine, University of Rijeka**

- 2008/09 2013/14: Basics of researches in nursery, teaching assistant,
   Associate degree program of nursery
- 2008/09 2013/14: Statistics, teaching assistant, Undergraduate study of Dental medicine
- -2008/09 2013/14: Scientific statistics and informatics, teaching assistant, Undergraduate study of Sanitary engineering
- $-\,2012/13$ : Medical statistics, teaching assistant, Associate degree program of physical therapy

## Department of Biotechnology, University of Rijeka

2014/15 – 2016/17: Physics, teaching assistant, Undergraduate programme
 "Biotechnology and drug research"

## Department of Informatics, University of Rijeka

– 2014/15: Fundamentals of Physics 2, teaching assistant, Undergraduate study programme in Informatics

## Faculty of Physics, University of Rijeka

Undergraduate Study Programme in Physics:

- 2014/15 2016/17: Classical mechanics 2 (teaching assistant)
- 2015/16 2016/17: Classical mechanics (teaching assistant)
- 2015/16 2016/17: Classical mechanics 1 (teaching assistant)
- 2015/16 2016/17: Modern physics 2 (teaching assistant)
- 2016./17.: Physics 4
- 2018/19 2023/24: Symbolic programing
- 2022/23 now: Classical mechanics 2

## Graduate Study Programme in Physics:

- 2014/15 2021/22: Elementary particle physics 1 (teaching assistant)
- 2015/16 2017/18: Observational Astrophysics (teaching assistant)

- 2017/18 now: Astroparticle physics
- 2017/18 now: Statistical mechanics

### Doctoral Study Programme in Physics:

- 2018/19 - now: Experimental methods in astroparticle physics

### **Student supervision**

#### Bachelor's theses:

- 2018: Adrian Udovičić, Spectral analysis of emission from active galactic nucleus Markarian 421 in the very high energy gamma-ray band
- 2019: Denis Hudinčec, Application of neural networks in physics
- 2019: Emil Reiter, Influence of potential Lorentz invariance violation on the shape of very high energy gamma-ray spectra of active galactic nuclei
- 2020: Vito Tuhtan, Correlation between gamma-ray flux and spectrum of blazars
- 2021.: Luka Blažević, Stochastic Lorentz invariance violation

#### Master's theses:

- 2019: Marko Šegon, Study of the high energy spectral peak in extreme BL Lac objects
- 2020: Dijana Pavlović, Positions of maxima in the spectrum of blazar Mrk421
- 2021.: Robert Pleše, Absorption of gamma rays within the Milky Way
- 2022.: Fran Ivan Vrban, *Photon–photon scattering under Lorentz invariance violation*
- 2023.: Angelo Zec, Correlations in emission from gamma-ray bursts
- 2023.: Luka Blažević, Search for Lorentz invariance violation in gamma-ray signal from Markarian 421

#### Doctoral theses:

- 2018 now: Jelena Strišković, doctoral student
- 2022 now: Filip Reščić, doctoral student

## MEMBERSHIP IN SCIENCE ORGANIZATIONS AND BODIES

#### **Societies**

- Croatian Physical Society (HFD)
- Mathematical Physical Society (DMF)
- International Society for Quantum Gravity (ISQG)

### Scientific collaborations

- MAGIC (Major Atmospheric Gamma-ray Imaging Cherenkov) Collaboration
- CTA (Cherenkov Telescope Array) Collaboration
- LST (Large Size Telescope) Collaboration part of the CTA
- SWGO (The Southern Wide-field Gamma-ray Observatory) Collaboration

#### AWARDS

- 2004: Croatian Physical Society: Award for selfless and devoted work in promotion of physics in Croatia
- 2018: Award for the best scientific publication of young researchers in the Division of Theoretical Physics and Astrophysics for year 2017, awarded by the Faculty of Physics of the University of Rijeka
- 2021.: Award for the best scientific publication for year 2020, awarded by the Faculty of Physics of the University of Rijeka for paper "Bounds on Lorentz invariance violation from MAGIC observation of GRB 190114C" published in Physical Review Letters

# TECHNICAL SKILLS AND COMPETENCIES

- Usage of Linux and MS Windows operating systems
- Programing with C++, Mathematica, Python
- Usage of LaTex, Open Office, MS Office
- ROOT software environment
- MAGIC telescope data analysis
- Imaging atmospheric Cherenkov telescope operation

# ORGANIZATIONAL SKILLS AND COMPETENCIES

- Member of the organising committee of Rijeka school of physics, 2012 and 2013
- Co-organisation of Science fair in Rijeka, 2012 and 2013
- President of the Organising committee of Rijeka school of physics, 2016
- Member of the local organising committee of LST-CTA Collaboration meeting in Rijeka, 2019

- Leader of the working group for gamma-rays (working group 3), COST Action CA18108
- Leader of the working group for High-energy quantum gravity experiment (working group 2), COST Action CA23130
- Member of the organising committee of Second Annual Conference, COST Action CA18108, Corfu, Greece, 2021.
- Member of the organising committee of First Training School, COST Action CA18108, Corfu, Greece, 2021.
- Member of the organising committee of Third Annual Conference, COST Action CA18108, Napoli, Italy, 2022.
- Member of the organising committee of Second Training School, COST Action CA18108, Beograd, Serbia, 2022.
- Member of the organising committee of 59. Winter School of Theoretical Physics and Third Training School COST Action CA18108, Palac Wojanów, Poland, 2023.
- President of the organising committee of Fourth Annual Conference, COST Action CA18108, Rijeka, Croatia, 2023.

## DRIVING LICENCE(S)

B category 1996 A category 2010

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