



Marouane BENHASSI

📍 Via Alberto Sordi, 1 San Nicola la Strada Dintorni di Caserta, Caserta, Italy

☎ +39 347 310 0613

✉ marouanebenhassi2017@gmail.com

🌐 <https://marouanebenhassi.github.io/marouane.benhassi/>

Place and Date of Birth Marrakesh, 12th September 1997

Bio. I am currently a first-year PhD student at the University of Campania Luigi Vanvitelli in Italy, I am working on neutrino physics with the KM3NeT experiment. I am interested in calibration of the detector including simulation and data analysis using Python and PyROOT.

EDUCATION

Feb 2022 – Present

PhD student, University of Campania Luigi Vanvitelli, Italy

I am working on neutrino physics with the KM3NeT experiment.

- Experiment : KM3NeT/ARCA
- Laboratory : Campania AstroParticle Infrastructure facility (CAPACITY)
- Supervisor : PASQUALE MIGLIOZZI

Jun 2020 – Mar 2021

English Courses, Center for Language and Culture (CLC), Marrakesh, Morocco

Sep 2019 – Sep 2021

Master's degree in high energy physics, Cadi Ayyad University, Morocco

- **Rank** : 1st in the M2
- Title of Master's Degree Thesis: Neutrinos physics with KM3NeT detector
- Supervisor: MOHAMED CHABAB
- The report is available at : <https://www.researchgate.net/profile/Marouane-Benhassi>

Sep 2015 – Jun 2019

Bachelor's degree in modern physics, Cadi Ayyad University, Morocco

- Title of Bachelor's Degree Thesis: Particle matter interaction and multi-detectors
- Supervisor: DRISS GOUJDAI
- The report is available at : <https://www.researchgate.net/profile/Marouane-Benhassi>

PROFESSIONAL EXPERIENCES

Jan 2022 – Present

Website and Social Media Manager at HEPAC, UCA, Morocco

- Description: Enhancing online presence, fostering engagement, and delivering exceptional results through astute website management and strategic social media initiatives to elevate brand visibility and captivate the target audience.
- Website: <http://hepac.ouca.site>

Oct 2021 – Jan 2022

Part-time teacher in physics, Massar Al Omam high school, Marrakesh, Morocco

- Description: Teaching physics for high school and middle school students

Aug 2020 – Sep 2021

Internship at ESMaR laboratory, Rabat, Morocco

- Supervisor: JIHAD BOUMAAZA
- Description: Construction of the KM3NeT's detector used to detect Cherenkov radiations emitted by charged particles during their propagation in the Mediterranean Sea.

PROJECTS

2021 – 2022

Project: New physics searches in ultra-peripheral collisions in ALICE

- Description : Analysing UPCs of Pb-Pb data to look for $\tau\tau$ pair production at $\sqrt{s_{NN}} = 5.02$ TeV during Run 2.
- Tutor: ADAM MATYJA

2021 – 2022 **Project: Perform a typical analysis in particle physics**

- Description : having a model of signal and background (in the form of generated "Monte Carlo" events – MC samples), figure out a selection criteria that can be applied on data events to suppress the background contribution.

2021 – 2022 **Project : Analysis of the data from the Z boson decay**

- Description : Analyze data from the Z boson decay into two leptons using ROOT CERN software.

2019 – 2020 **Project: Analysis of the data from the Higgs boson decay**

- Description : Analyze the data of the Higgs boson decay into two photons using ROOT CERN software.

SKILLS

Languages

- English : Good
- French : Advanced
- Italian : Beginner
- Arabic : Maternel language

Computer skills

- Operating system : MacOS, GNU/Linux and Microsoft Windows
- Programing Language : **Experienced** : C++ **Familiar** : Python, Fortran, MATLAB, Maple, Mathematica, HTML, CSS
- Framework and Libraries : ROOT CERN, PyROOT, Geant4 (bigger)
- Technologies : Git, \LaTeX , Microsoft office pack

SCHOOLS AND CONFERENCES

2022 – 2023 Particle Physics Summer School, Krakow, Poland, **Invited talk**

2022 – 2023 ISAPP School, Varenna, Italy, Participant

2021 – 2022 Particle Physics Summer School, Krakow, Poland, Participant

2020 – 2021 Bad Honnef Physics School, Bad Honnef, Germany, Participant

2020 – 2021 ICTP Summer School, Trieste, Italy, Participant

EXTRA-CURRICULAR ACTIVITIES

2020 – present Member of HEPA Club: Making physics simple for everyone, Marrakesh, Morocco

- Website: <http://hepac.ouca.site>

Hobbies Reading, Playing guitar, Playing football

REFERENCES

Adam Matyja

- Member of ALIC experiment and the Institute of Nuclear Physics Polish Academy of Sciences (IFJ PAN)
- Researcher
- My supervisor
- adam.tomasz.matyja@cern.ch

Mohamed EL KACIMI

- Member of ATLAS experiment and the High Energy and Astrophysics Laboratory
- Senior university teacher
- My Master teacher
- elkacimi@uca.ac.ma