

# Curriculum Vitae

## Personal Information

Prof. Dr. Amine Ahriche  
 Department of Applied Physics and Astronomy, University of Sharjah, P.O. Box  
 27272 Sharjah, UAE  
 Email: [ahriche@sharjah.ac.ae](mailto:ahriche@sharjah.ac.ae) or [aahriche@ictp.it](mailto:aahriche@ictp.it)  
 ResearchGate: [www.researchgate.net/profile/amine\\_ahriche](http://www.researchgate.net/profile/amine_ahriche)  
 ORCID: [orcid.org/0000-0003-0230-1774](http://orcid.org/0000-0003-0230-1774)  
 Google Scholar: [scholar.google.com/citations?user=gBxncMUAAAAJ](http://scholar.google.com/citations?user=gBxncMUAAAAJ)



## Education

### University of Bielefeld

PhD. in High Energy Physics, Apr. 2007

Dissertation: [The Electroweak Phase Transition in Models with Gauge Singlets](#)

Bielefeld, Germany

### University of Constantine

Master in Theoretical Physics, June 2002

Dissertation: [Probing the Neutrino Mass Spectrum through Supernovae Bursts](#)

Constantine, Algeria

### University of Constantine

B.Sc in Theoretical Physics, June 1999

Constantine, Algeria

## Professional Experience

### Professor

Department of Applied Physics and Astronomy, University of Sharjah, UAE

Sep. 2020 - present

### Professor

Department of Physics, University of Jijel, Algeria

Jan. 2016 - Sep. 2020

### Associate Professor

Department of Physics, University of Jijel, Algeria

Dec. 2010 - Jan. 2016

### Assistant Professor

Department of Physics, University of Jijel, Algeria

May. 2007 - Dec. 2010

### Research Associate

Physics Faculty, University of Bielefeld, Germany

Apr. 2004 - Apr. 2007

### Research and Teaching Assistant

Department of Physics, University of Jijel, Algeria

Dec. 2002 - Mar. 2004

### Research Junior Associate

The abdulalam international center for theoretical physics (ICTP), Trieste, Italy

Jan. 2012 - Dec. 2017

### Research Regular Associate

The abdulalam international center for theoretical physics (ICTP), Trieste, Italy

Jan. 2019 - Present

## Given Lectures

"Quantum Mechanics-I", "Quantum Mechanics-II", "Special relativity and electromagnetism", "General physics", "Mathematics for physicists", "Numerical analysis", "Numerical methods", "Cosmology", "Particle physics", "Gauge Theories & Standard Model", "Simulation Methods" and "Scientific English".

## Research Interest

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My research interests are focused on Particle Physics, Astroparticle Physics and Cosmology, mainly on physics Beyond the Standard Model (BSM). They include

- Higgs Physics & Collider Physics.
- Dark Matter.
- Neutrino Physics & Astrophysics.
- Baryogenesis, electroweak phase transition & gravitational Waves.
- Physics Beyond the Standard Model (extra dimensions, Supersymmetry,...).

## Publications

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List of the last five publications:

1. 'Mono-Higgs Signature in the Scotogenic Model with Majorana Dark Matter'  
A. **Ahriche**, A. Arhrib, A. Jueid, S. Nasri and A. de La Puente, *Phys.Rev. D***101**, (2020)3, 035038.
2. 'Gravitational Waves from Phase Transitions in Models with Charged Singlets'  
A. **Ahriche**, K. Hashino, S. Kanemura and S. Nasri, *Phys. Lett. B* **789**, 119 (2019).
3. 'Radiative neutrino mass and Majorana dark matter within an inert Higgs doublet model'  
A. **Ahriche**, Adil Jueid and S. Nasri *Phys. Rev. D***97** (2018), no. 9, 095012.
4. 'Identifying the nature of dark matter at  $e^-e^+$  colliders'  
N. Baouche and A. **Ahriche**  
*Phys.Rev. D***96** (2017) no.5, 055029.
5. 'Right-Handed Neutrinos: Dark Matter, Lepton Flavor Violation, and Lepton Collider Searches'  
M. Chekkal, A. **Ahriche**, A. B. Hammou and S. Nasri  
*Phys.Rev. D***95** (2017) no.9, 095025.

The full list of my publication can be found [here](#).

## Invited Seminars and Lectures

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List of selected seminars and given lectures:

1. Amine Ahriche  
'The electroweak symmetry restoration at high temperature for Little Higgs'  
Seminar given at the Physics Department, UAEU, Al-Ain, UAE on 12/04/2010.
2. Amine Ahriche  
'A Strong Phase Transition at the Weak Scale within the U(1)-Extended MSSM'  
Seminar given at Laboratoire d'Annecy-le-Vieux de Physique Theorique, France on 27/01/2011.
3. Amine Ahriche  
'Neutrino Mass Models at Three-Loop and their Phenomenology'  
Seminar given at the Physics Faculty, University of Bielefeld, Bielefeld, Germany on 09/12/2014.
4. Amine Ahriche  
'Phenomenology of Three-Loop Neutrino Masses Models'  
Seminar given at NCTS, National Taiwan University, Taipei, Taiwan on 21/12/2015; and at the Institute of Physics, Academia Sinica, Taiwan on 28/12/2015.
5. Amine Ahriche  
'Phenomenology of Radiative Neutrino Masses Models'  
Seminar given at the HECAP section at the ICTP, Trieste, Italy on 24/08/2017.