

# Daniel Galviz

galvizblancod@gmail.com

## Curriculum Vitae

### EDUCATION

#### B.SC IN PHYSICS

##### SUMMA CUM LAUDE

University of Los Andes | 2017  
Merida, Venezuela

#### MASTER DEGREE IN PHYSICS

Universität Bonn | Germany.  
BCGS Scholarship Honors Branch  
focused on HEP; String Theory and QFT.

### SKILLS

#### PROGRAMMING

• Matlab • Mathematica

#### LANGUAGES

Spanish: Native.

English: Fluent.

~~German: Beginner.~~

### WORK EXPERIENCE

#### TEACHING ASSISTANT

##### Bachelor level:

##### • ELECTROMAGNETISM

University of Los Andes (ULA) | 2016  
Merida, VE

##### Master level:

##### • ADVANCED QUANTUM THEORY

Universität Bonn | Winter semester  
2018/2019 Bonn, DE

##### • GENERAL RELATIVITY

Universität Bonn | Summer semester  
2019 Bonn, DE

##### • ADVANCED QUANTUM THEORY

Universität Bonn | Winter semester  
2019/2020 Bonn, DE

##### • ADVANCED THEORETICAL HADRON PHYSICS

Universität Bonn | Summer semester  
2020 Bonn, DE

### PERSONAL INFORMATION

- Full Name:  
Daniel Eduardo Galviz Blanco
- Date and place of birth:  
August 12th, 1994  
San Cristobal, Venezuela
- Nationality: Venezuelan

### RESEARCH INTERESTS

- Mathematical Physics • QFT
- String theory • SCFT



### PUBLICATIONS

Partially Massless Theory in Three Dimensions and Self-dual Massive Gravity,  
D. Galviz, and A. Khoudeir. Modern Physics Letters A. Vol. 33, No. 12, [1850067](#)  
(2018).

A New Theory Framework for the Electroweak Radiative Corrections in  $K_{l3}$  Decays,  
C.-Y. Seng, D. Galviz, and U.-G. Meißner. Journals High Energy Phys.  
[10.1007/JHEP02\(2020\)069](#).

Improved  $K_{e3}$  radiative corrections sharpen the  $K_{\mu 2}-K_{l3}$  discrepancy, C.-Y. Seng, D.  
Galviz, M. Gorchtein and U.-G. Meißner. Accepted in Physical Review D.  
[arXiv:2103.04843](#).

High-precision determination of the  $K_{e3}$  radiative corrections, C.-Y. Seng, D. Galviz,  
M. Gorchtein and U.-G. Meißner. Submitted for publication. [arXiv:2103.00975](#).

#### RESEARCH ASSISTANT | PROJECT: MATHEMATICAL OPTICS

National Autonomous University of Mexico | Aug-Oct 2016 Cuernavaca, MX

- Working on mathematical methods for signal processing, especially with the Wigner Ville distribution for analysing bioacoustic signals. Under the supervision of Prof. Kurt Bernardo Wolf at Institute for Physical Science.

#### RESEARCH ASSISTANT | PROJECT: QUANTUM KEY DISTRIBUTION

University of Waterloo | May-Aug 2017 Ontario, CA

- Designing new protocols for optical scenarios in Quantum Key Distribution with quantum information theory. Under the supervision of Prof. Norbert Lütkenhaus at Institute for Quantum Computing.

#### RESEARCH ASSISTANT | PROJECT: CFT AND FUSION RULES

Universität Bonn | Oct-Dec 2018 Bonn, DE

- Applying CFT techniques to calculate modular transformations and fusion rules of minimal models and orbifolds. Under the supervision of Prof. Albrecht Klemm at Bethe Center for Theoretical Physics.

## FULL SCHOLARSHIPS

- **International Center for Theoretical Physics-SAIFR | 2016, São Paulo, BR**  
To participate in the 'IFT - Perimeter - SAIFR Journeys into Theoretical Physics'.  
During the journeys five theoretical physics topics were covered.
- **Quantum Information Division of the Mexican Physical Society | 2016 MX.**  
To perform a research during the summer period with the Theoretical and Computational Physics group, ICF-UNAM.
- **Undergraduate Research Award by Institute for Quantum Computing | 2017 Waterloo, CA**  
To work alongside a faculty member of University of Waterloo during the summer and to participate in the Undergraduate School on Experimental Quantum Information Processing (USEQIP).
- **Honors Branch Full Scholarship by BCGS for Physics and Astronomy | 2017 Bonn, DE**  
To perform a Master program of studies and research between universities of Bonn and Cologne.
- **Research fellowship | September 2020 Bonn, DE**  
To research on effective field theories in the context of QFT and Standard Model with Prof. Ulf-G. Meissner.

## HONOURS

- 2011 Honorific Mention bestowed by the Venezuelan Association for the Advancement of Science for the work titled: "Elaboration of a protein and energy drink made from whey cheese obtained in Pasteurizadora Tachira®".
- 2012 "Luis María Ribas Dávila" Order. For having obtained the greatest academic performance in the School of Chemistry | ULA
- 2015 "Luis María Ribas Dávila" Order. For having obtained the greatest academic performance in the School of Physics | ULA
- 2016 "Luis María Ribas Dávila" Order. For having obtained the greatest academic performance in the School of Physics | ULA
- 2017 "Summa Cum Laude" mention for having earned the B.Sc in physics degree with highest honor | ULA

## SELECTED ACTIVITIES

- 2018 participated Winter School Geometry, Analysis and Physics | Geilo, NO.
- 2018 Speaker Seminar on Matrix model in topological string theory | Bonn, DE.
- 2019 participated DESY Summer School in Scattering Amplitudes in Gauge and String Theory | Hamburg, DE.
- 2019 Speaker Seminar on SUSY representations in 4d and 11d | Bonn, DE.
- 2020 participated YRISW: A Modern primer for Superconformal Field Theories | Hamburg, DE.
- 2021 participated Junior Duality and Integrability Workshop.
- 2021 participated Modular Forms in String Compactifications | Bonn, DE.
- 2021 participated Quantum Gravity and Modularity | Dublin, IE.

## OTHER ACTIVITIES

- 2011 Attendance First National Meeting of Chemistry | Tachira, VE.
- 2012 Participated First Colloquium about Chemical Products and Process | Merida, VE.
- 2014 Approved Introduction to Astronomy course | Merida, VE.
- 2014 Approved Geometry course | Merida, VE.
- 2014 Approved Introduction to Fluid Dynamics course | Merida, VE.
- 2016 Participated International Masterclasses Hands on Particle Physics | Merida, VE.
- 2017 participated Undergraduate School on Experimental Quantum Information Processing | Waterloo, CA.
- 2019 participated BCGS Weekend Seminar | Bad Honnef, DE.
- 2019 participated Number Theoretic Methods in Quantum Physics | Bonn, DE.
- 2020 Invited speaker HISKP Seminar: New Theory Method for Electroweak Radiative Corrections in  $K_{l3}$  Decay | Bonn, DE.