# Daniel Galviz

## Curriculum Vitae

## EDUCATION

### B.Sc in Physics
**Summa Cum Laude**
University of Los Andes | 2017
Merida, Venezuela

### Master Degree in Physics
Universität Bonn| 2020 Germany.
BCGS Scholarship Honors Branch focused on HEP; String Theory and QFT.

### PhD. Candidate in Mathematics
Tsinghua University| China.
Ongoing studies at Yau Mathematical Science Center focused in Mathematical physics.

## 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

Daniel Eduardo Galviz Blanco
Nationality:Venezuelan, Colombian

## RESEARCH INTERESTS

•Mathematical Physics •String theory •SCFT

## PUBLICATIONS

Inspire HEP

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.

High-precision determination of the $K_{e3}$ radiative corrections, C.-Y. Seng, D. Galviz, M. Gorchtein and U.-G. Meißner. Physics Letters B.10.1016/j.physletb.2021.136522.

Improved $K_{e3}$ radiative corrections sharpen the $K_{\mu 2}$–$K_{l3}$ discrepancy, C.-Y. Seng, D. Galviz, M. Gorchtein and U.-G. Meißner. JHEP. 10.1007/JHEP11(2021)172.

An update on $|V_{us}|$ and $|V_{us}/V_{ud}|$ from semileptonic kaon and pion decays. C.-Y. Seng, D. Galviz, W. Marciano and U.-G. Meißner. PhysRevD. PhysRevD.105.013005.

Full $K_{l3}$ radiative corrections and implications on $|V_{us}|$, C.-Y. Seng, D. Galviz, M. Gorchtein and U.-G. Meißner. Soon to appear.

### 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.

**RESEARCH ASSISTANT|** Project: New Framework for the Electroweak Radiative Corrections
HISKP and BCTP | Sept. 2020 - Sept. 2022 Bonn, DE

- Developing a new theoretical framework for one-loop corrections in effective field theories in the context of QFT/SM. Under the supervision of Prof. U.-G. Meißner 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 2020-2022 Bonn, DE
A New Theory Framework for the Electroweak Radiative Corrections.

•YMSC PhD. Student Scholarship| September 2021-2025 Beijing, CN
To perform a doctoral program of studies and research at Yau Mathematical Science Center, Tsinghua University.

## HONOURS

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

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|---|---|---|
| 2016 | Participated | IFT-Perimeter-SAIFR Journeys into Theoretical Physics\|São Paulo, BR. |
| 2017 | participated | Undergraduate School on Experimental Quantum Information Processing \|Waterloo, CA. |
| 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. |
| 2020 | Invited speaker | HISKP Seminar: New Theory Method for Electroweak Radiative Corrections in $K_{l3}$ Decay\|Bonn, 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. |
| 2021 | participated | String Math 2021, IMPA \| Rio de Janeiro , DE. |
| 2021 | participated | Strings 2021 \|Natal, BR. |