## YOUR NAME

ADDRESS: Your department

number street city

PHONE: your number
EMAIL: your-email
WEBPAGE: your page
ORCID: number
INSPIRE: name.1

### **EDUCATION**

PhD in subject— University

Duration

Dissertation: *Title*.

Dissertation Committee: Profs. X and Y.

Supervisor: Prof. Z.

Bachelors degree in subject – University DURATION

Comment.

### ACADEMIC POSITIONS

#### Post-Doctoral Position

DURATION

Researcher at intitute working with Prof. X, focusing on xyz.

### FELLOWSHIPS AND AWARDS

**Award** (MONTH year): description.

## ACADEMIC ENGAGEMENT

## TRAINING AND RESEARCH PLACEMENTS

• Event or network, date: what you did.

## EXPERIMENTAL COLLABORATIONS

• Member of **experimental** collaboration.

#### TEACHING AND MENTORING

• Role, period: taught xyz.

## EVENT ORGANIZATION AND COMMUNITY ENGAGEMENT

• Weak Interactions and Neutrinos 2021: role website.

#### SCIENCE OUTREACH

• Outreach event: role, more info.

### INVITED SEMINARS AND CONFERENCE PRESENTATIONS

1. University (Country): date, invited seminar.

## **PUBLICATIONS**

## Peer-reviewed publications:

1. "My title", authors, PRD 000 00 (2000), arXiv:0000.00000.

#### Preprints:

1. "New Particles Workshop Report", Author, Main et al, submitted to PRD, arXiv:0000.00000.

## Non-peer reviewed publications

1. "A", B C conference.

#### Peer-reviewed publications

- Dipole-coupled heavy-neutral-lepton explanations of the MiniBooNE excess including constraints from MINERvA data, Nicholas W. Kamp, Matheus Hostert, Austin Schneider, Stefano Vergani, Carlos A. Argüelles, Janet M. Conrad, Michael H. Shaevitz, Melissa A. Uchida, Phys.Rev.D 107 (2023) 5 055009, arXiv:2206.07100 [hep-ph], citations: 10.
- 2. Efficiently exploring multidimensional parameter spaces beyond the Standard Model, Carlos A. Argüelles, Nicolò Foppiani, Matheus Hostert, Phys.Rev.D 107 (2023) 3 035027, arXiv:2205.12273 [hep-ph], citations: 1.
- 3. The present and future status of heavy neutral leptons, Asli M. Abdullahi, Pablo Barham Alzas, Brian Batell, James Beacham, Alexey Boyarsky, Saneli Carbajal, Animesh Chatterjee, Jose I. Crespo-Anadon, Frank F. Deppisch, Jaehoon Yu, J.Phys.G 50 (2023) 2 020501, arXiv:2203.08039 [hep-ph], citations: 76.
- 4. New physics searches at kaon and hyperon factories, Evgueni Goudzovski, Diego Redigolo, Kohsaku Tobioka, Jure Zupan, Gonzalo Alonso-Álvarez, Daniele S. M. Alves, Saurabh Bansal, Martin Bauer, Joachim Brod, Robert Ziegler, Rept.Prog.Phys. 86 (2023) 1 016201, arXiv:2201.07805 [hep-ph], citations: 51.
- Dark sectors in neutron-shining-through-a-wall and nuclear-absorption signals, Matheus Hostert, David McKeen, Maxim Pospelov, Nirmal Raj, Phys.Rev.D 107 (2023) 7 075034, arXiv:2201.02603 [hep-ph], citations: 7.
- 6. MicroBooNE and the ¡math display="inline"¿¡mrow¿¡msub¿¡mrow¿¡mi¿¡/mi¿¡/mrow¿¡mrow¿¡mi¿e¡/mi¿¡/mrow¿¡msub Interpretation of the MiniBooNE Low-Energy Excess, C. A. Argüelles, I. Esteban, M. Hostert, Kevin J. Kelly, J. Kopp, P. A. N. Machado, I. Martinez-Soler, Y. F. Perez-Gonzalez, Phys.Rev.Lett. 128 (2022) 24 241802, arXiv:2111.10359 [hep-ph], citations: 55.
- 7. Heavy neutral leptons below the kaon mass at hodoscopic neutrino detectors, Carlos A. Argüelles, Nicolò Foppiani, Matheus Hostert, Phys.Rev.D 105 (2022) 9 095006, arXiv:2109.03831 [hep-ph], citations: 27.
- 8. Feebly-interacting particles: FIPs 2020 workshop report, Prateek Agrawal, Martin Bauer, James Beacham, Asher Berlin, Alexey Boyarsky, Susana Cebrian, Xabier Cid-Vidal, David d'Enterria, Albert De Roeck, Yu-Dai Tsai, Eur.Phys.J.C 81 (2021) 11 1015, arXiv:2102.12143 [hep-ph], citations: 174.
- 9. Novel multilepton signatures of dark sectors in light meson decays, Matheus Hostert, Maxim Pospelov, Phys.Rev.D 105 (2022) 1 015017, arXiv:2012.02142 [hep-ph], citations: 18.
- 10. Constraints on decaying sterile neutrinos from solar antineutrinos, Matheus Hostert, Maxim Pospelov, Phys.Rev.D 104 (2021) 5 055031, arXiv:2008.11851 [hep-ph], citations: 18.
- 11. A dark seesaw solution to low energy anomalies: MiniBooNE, the muon (g2), and BaBar, Asli Abdullahi, Matheus Hostert, Silvia Pascoli, Phys.Lett.B 820 (2021) 136531, arXiv:2007.11813 [hep-ph], citations: 50.
- 12. Pair production of dark particles in meson decays, Matheus Hostert, Kunio Kaneta, Maxim Pospelov, Phys.Rev.D 102 (2020) 5 055016, arXiv:2005.07102 [hep-ph], citations: 22.
- 13. New opportunities at the next-generation neutrino experiments I: BSM neutrino physics and dark matter, C. A. Argüelles, A. J. Aurisano, B. Batell, J. Berger, M. Bishai, T. Boschi, N. Byrnes, A. Chatterjee, A. Chodos, C. Zhang, Rept.Prog.Phys. 83 (2020) 12 124201, arXiv:1907.08311 [hep-ph], citations: 71.
- Neutrino Non-Standard Interactions: A Status Report, P. S. Bhupal Dev, K. S. Babu, Peter B. Denton, Pedro A. N. Machado, Carlos A. Argüelles, Joshua L. Barrow, Sabya Sachi Chatterjee, Mu-Chun Chen, André de Gouvêa, Xun-Jie Xu, SciPost Phys.Proc. 2 (2019) 001, arXiv:1907.00991 [hep-ph], citations: 149.

- 15. Neutrino Masses from a Dark Neutrino Sector below the Electroweak Scale, Peter Ballett, Matheus Hostert, Silvia Pascoli, Phys.Rev.D 99 (2019) 9 091701, arXiv:1903.07590 [hep-ph], citations: 46.
- 16. Dark Neutrinos and a Three Portal Connection to the Standard Model, Peter Ballett, Matheus Hostert, Silvia Pascoli, Phys.Rev.D 101 (2020) 11 115025, arXiv:1903.07589 [hep-ph], citations: 66.
- $17. \ \ Z^inneutrinos cattering at DUNE, Peter Ballett, Matheus Hostert, Silvia Pascoli, Yuber F. Perez-Gonzalez, Zahra Tande 1902.08579 [hep-ph], citations: {\bf 60}. Neutrino trident production at near detectors, Matheus Hostert, PoSNOW 2018 (2011). \\$
- 18. Testing New Physics Explanations of the MiniBooNE Anomaly at Neutrino Scattering Experiments, Carlos A. Argüelles, Matheus Hostert, Yu-Dai Tsai, Phys.Rev.Lett. 123 (2019) 26 261801, arXiv:1812.08768 [hep-ph], citations: 66.
- Neutrino Trident Scattering at Near Detectors, Peter Ballett, Matheus Hostert, Silvia Pascoli, Yuber F. Perez-Gonzalez, Zahra Tabrizi, Renata Zukanovich Funchal, JHEP 01 (2019) 119, arXiv:1807.10973 [hep-ph], citations: 48.

#### Under review or non-peer reviewed publications

- 1. Effective portals to heavy neutral leptons, Enrique Fernández-Martínez, Manuel González-López, Josu Hernández-García, Matheus Hostert, Jacobo López-Pavón, preprint, 2023, arXiv:2304.06772 [hep-ph].
- 2. Constraining Light Thermal Inelastic Dark Matter with NA64, Martina Mongillo, Asli Abdullahi, Benjamin Banto Oberhauser, Paolo Crivelli, Matheus Hostert, Daniele Massaro, Laura Molina Bueno, Silvia Pascoli, preprint, 2023, arXiv:2302.05414 [hep-ph], citations: 1.
- 3. Semi-Visible Dark Photons below the Electroweak Scale, Asli M. Abdullahi, Matheus Hostert, Daniele Massaro, Silvia Pascoli, preprint, 2023, arXiv:2302.05410 [hep-ph], citations: 1.
- 4. Implications of MicroBooNE's low sensitivity to electron antineutrino interactions in the search for the MiniBooNE excess, Nicholas W. Kamp, Matheus Hostert, Carlos A. Argüelles, Janet M. Conrad, Michael H. Shaevitz, preprint, 2023, arXiv:2301.12573 [hep-ph].
- 5. Dark Sector Studies with Neutrino Beams, Brian Batell, Joshua Berger, Vedran Brdar, Alan D. Bross, Janet M. Conrad, Patrick deNiverville, Valentina De Romeri, Bhaskar Dutta, Saeid Foroughi-Abari, Jaehoon Yu, proceedings, 2022, arXiv:2207.06898 [hep-ph], citations: 11.
- DarkNews: a Python-based event generator for heavy neutral lepton production in neutrino-nucleus scattering, Asli M. Abdullahi, Jaime Hoefken Zink, Matheus Hostert, Daniele Massaro, Silvia Pascoli, preprint, 2022, arXiv:2207.04137 [hep-ph], citations: 5.
- A Snowmass Whitepaper: Dark Matter Production at Intensity-Frontier Experiments, G. Krnjaic, N. Toro, A. Berlin, B. Batell, N. Blinov, L. Darme, P. DeNiverville, P. Harris, C. Hearty, Y. -D. Tsai, preprint, 2022, arXiv:2207.00597 [hep-ph], citations: 16.
- 8. The Physics Case for a Neutrino Factory, Alex Bogacz, Vedran Brdar, Alan Bross, André de Gouvêa, Jean-Pierre Delahaye, Patrick Huber, Matheus Hostert, Kevin J. Kelly, Ken Long, Zahra Tabrizi, proceedings, 2022, arXiv:2203.08094 [hep-ph], citations: 6.
- White Paper on Light Sterile Neutrino Searches and Related Phenomenology, M. A. Acero, C. A. Argüelles, M. Hostert, D. Kalra, G. Karagiorgi, K. J. Kelly, B. Littlejohn, P. Machado, W. Pettus, B. Zamorano, preprint, 2022, arXiv:2203.07323 [hep-ex], citations: 34.
- 10. Neutrino Self-Interactions: A White Paper, Jeffrey M. Berryman, Nikita Blinov, Vedran Brdar, Thejs Brinckmann, Mauricio Bustamante, Francis-Yan Cyr-Racine, Anirban Das, André de Gouvêa, Peter B. Denton, Yue Zhang, proceedings, 2022, arXiv:2203.01955 [hep-ph], citations: 23.
- Forward Physics Facility Snowmass 2021 Letter of Interest, Roshan Mammen Abraham, Henso Abreu, Yoav Afik, Sanjib Kumar Agarwalla, Juliette Alimena, Luis Alfredo Anchordoqui, Claire Antel, Akitaka Ariga, Tomoko Ariga, Yi-Ming Zhong, preprint, 2020, citations: 17.
- 12. Hidden Physics at the Neutrino Frontier: Tridents, Dark Forces, and Hidden Particles, Matheus. Hostert, thesis, 2019.

13. Light Sterile Neutrinos at : Decoherence and CP violation, Peter Ballett, Matheus Hostert, Silvia Pascoli, proceedings, 2017, arXiv:1705.09214 [hep-ph], citations: 1.

# OTHER SKILLS