

Publication List

26 publications in peer-reviewed journals with major contribution and 3 manuscripts submitted for publication (14 as corresponding author). Co-author of more than 50 publications of the H.E.S.S. collaboration, 11 publications of the *Fermi*-LAT collaboration, 23 conference proceedings, and 4 white papers. According to [NASA ADS](#), the publications have in total more than 5300 citations with an h index of 33. A publication list including all collaboration papers can be found on [ORCID](#). Please note that, according to the policies of the scientific Collaborations of which I am a member, author lists of collaboration papers are always in alphabetical order. Corresponding author publications are marked with an asterisk (*).

Peer Reviewed Publications

- 29:** H. Abdalla et al. (H.E.S.S. & MAGIC Collaborations, including **M. Meyer**),
Observation of a sudden cessation of a very-high-energy γ -ray flare in PKS 1510–089 with H.E.S.S. and MAGIC in May 2016,
Accepted by A&A 2020, arXiv: [2012.10254 \[astro-ph.HE\]](#).
- 28:** R. Buehler, G. Gallardo, G. Maier, A. Dominguez, M. López, and **M. Meyer**,
Search for the imprint of axion-like particles in the highest-energy photons of hard γ -ray blazars,
JCAP, Vol. 2020, No. 9, 027, p. 027, 2020, arXiv: [2004.09396 \[astro-ph.HE\]](#)
- 27:** ***M. Meyer** and T. Petrushevska,
Search for Axionlike-Particle-Induced Prompt γ -Ray Emission from Extragalactic Core-Collapse Supernovae with the Fermi Large Area Telescope,
Phys. Rev. Lett. Vol. 124, No. 23, 231101, p. 231101, 2020, arXiv: [2006.06722 \[astro-ph.HE\]](#)
- 26:** G. Chiaro et al. (including **M. Meyer**),
Identifying TeV Source Candidates among Fermi-LAT Unclassified Blazars,
Astrophys. J., Vol. 887, No. 1, 104, p. 104, 2019, arXiv: [1909.10834 \[astro-ph.HE\]](#)
- 25:** H. Abdalla et al. (H.E.S.S. Collaboration, including **M. Meyer**),
Constraints on the emission region of 3C 279 during strong flares in 2014 and 2015 through VHE γ -ray observations with H.E.S.S.,
A&A, Vol. 627, A159, A159, 2019, arXiv: [1906.04996 \[astro-ph.HE\]](#)
- 24:** ***M. Meyer**, J. D. Scargle, and R. D. Blandford,
Characterizing the gamma-ray variability of the brightest flat spectrum radio quasars observed with the Fermi LAT,
Astrophys. J., Vol. 877, No. 1, 39, p. 39, 2019, arXiv: [1902.02291 \[astro-ph.HE\]](#)
- 23:** ***M. Ackermann** et al. (*Fermi*-LAT Collaboration, including **M. Meyer**),
The Search for Spatial Extension in High-latitude Sources Detected by the Fermi Large Area Telescope,
Astrophys. J. Suppl. Vol. 237, 32, p. 32, 2018, arXiv: [1804.08035 \[astro-ph.HE\]](#)
- 22:** **M. Ackermann** et al. (*Fermi*-LAT Collaboration, including **M. Meyer**),
Search for Gamma-Ray Emission from Local Primordial Black Holes with the Fermi Large Area Telescope,
Astrophys. J., Vol. 857, 49, p. 49, 2018
- 21:** A. Desai et al. (including **M. Meyer**),
Probing the EBL evolution at high redshift using GRBs detected with the Fermi-LAT,
Astrophys. J., Vol. 850, No. 1, p. 73, 2017, arXiv: [1710.02535 \[astro-ph.HE\]](#)
- 20:** H. Abdalla et al. (H.E.S.S. Collaboration, including **M. Meyer**),
Measurement of the EBL spectral energy distribution using the VHE gamma-ray spectra of H.E.S.S. blazars,
A&A, Vol. 606, A59, 2017, arXiv: [1707.06090 \[astro-ph.HE\]](#)
- 19:** ***C. Balázs**, J. Conrad, B. Farmer, T. Jacques, T. Li, **M. Meyer**, F. S. Queiroz, and M. A. Sánchez-Conde,
Sensitivity of the Cherenkov Telescope Array to the detection of a dark matter signal in comparison to direct detection and collider experiments,
Phys. Rev. D, Vol. 96, p. 083002, 2017, arXiv: [1706.01505 \[astro-ph.HE\]](#).
- 18:** ***M. Meyer**, M. Giannotti, A. Mirizzi, M. Sánchez-Conde, and J. Conrad,
The Fermi Large Area Telescope as a Galactic Supernovae Axionscope,

Phys. Rev. Lett. Vol. 118, No. 1, p. 011103, 2017, arXiv: [1609.02350 \[astro-ph.HE\]](#).

17: A. Albert et al. (Fermi-LAT and DES Collaborations, including **M. Meyer**),
Searching for Dark Matter Annihilation in Recently Discovered Milky Way Satellites with Fermi-LAT,
Astrophys. J., Vol. 834, No. 2, p. 110, 2017, arXiv: [1611.03184 \[astro-ph.HE\]](#).

16: ***M. Meyer**, J. Conrad, and H. Dickinson,
Sensitivity of the Cherenkov Telescope Array to the Detection of Intergalactic Magnetic Fields,
Astrophys. J., Vol. 827, No. 2, p. 147, 2016, arXiv: [1603.03431 \[astro-ph.HE\]](#).

15: E. Charles et al. (including **M. Meyer**),
Sensitivity projections for dark matter searches with the Fermi large area telescope,
Phys. Rep. Vol. 636, pp. 1–46, 2016, arXiv: [1605.02016 \[astro-ph.HE\]](#).

14: ***M. Ajello** et al. (Fermi-LAT Collaboration, including **M. Meyer**),
Search for Spectral Irregularities due to Photon-Axionlike-Particle Oscillations with the Fermi Large Area Telescope,
Phys. Rev. Lett. (Editor's suggestion), Vol. 116, No. 16, 161101 2016, arXiv: [1603.06978 \[astro-ph.HE\]](#).

13: B. Berenji, J. Gaskins, and **M. Meyer**,
Constraints on axions and axionlike particles from Fermi Large Area Telescope observations of neutron stars,
Phys. Rev. D, Vol. 93, No. 4, 045019 2016, arXiv: [1602.00091 \[astro-ph.HE\]](#).

12: Aleksić et al. (MAGIC Collaboration, with **M. Meyer**),
Measurement of the Crab Nebula spectrum over three decades in energy with the MAGIC telescopes,
Journal of High Energy Astrophysics, Vol. 5, pp. 30–38, 2015, arXiv: [1406.6892 \[astro-ph.HE\]](#).

11: ***M. Meyer** and J. Conrad,
Sensitivity of the Cherenkov Telescope Array to the detection of axion-like particles at high gamma-ray opacities,
JCAP, Vol. 12, 016, p. 016, 2014, arXiv: [1410.1556 \[astro-ph.HE\]](#).

10: ***M. Meyer**, D. Montanino, and J. Conrad,
On detecting oscillations of gamma rays into axion-like particles in turbulent and coherent magnetic fields,
JCAP, Vol. 9, 003, p. 003, 2014, arXiv: [1406.5972 \[astro-ph.HE\]](#).

9: ***M. Meyer**, D. Horns, and M. Raue,
First lower limits on the photon-axion-like particle coupling from very high energy gamma-ray observations,
Phys. Rev. D, Vol. 87, No. 3, 035027 2013, arXiv: [1302.1208 \[astro-ph.HE\]](#).

8: D. Horns et al. (including **M. Meyer**),
Hardening of TeV gamma spectrum of active galactic nuclei in galaxy clusters by conversions of photons into axionlike particles,
Phys. Rev. D, Vol. 86, No. 7, 075024 2012, arXiv: [1207.0776 \[astro-ph.HE\]](#).

7: M. Raue and **M. Meyer**,
Probing the peak of the star formation rate density with the extragalactic background light,
MNRAS, Vol. 426, pp. 1097–1106, 2012, arXiv: [1203.0310 \[astro-ph.CO\]](#).

6: ***M. Meyer**, M. Raue, D. Mazin, and D. Horns,
Limits on the extragalactic background light in the Fermi era,
A&A, Vol. 542, A59 2012, arXiv: [1202.2867 \[astro-ph.CO\]](#).

5: D. Horns and **M. Meyer**,
Indications for a pair-production anomaly from the propagation of VHE gamma-rays,
JCAP, Vol. 2, 033, p. 033, 2012, arXiv: [1201.4711 \[astro-ph.CO\]](#).

4: ***M. Meyer**, D. Horns, and H.-S. Zechlin,
The Crab Nebula as a standard candle in very high-energy astrophysics,
A&A, Vol. 523, A2 2010, arXiv: [1008.4524 \[astro-ph.HE\]](#).

Submitted

3: ***M. Meyer**, M. Petropoulou, and I. Christie,
The observability of plasmoid-powered γ -ray flares with the Fermi Large Area Telescope,
Submitted to Astrophys. J. 2020, arXiv: [2012.09944 \[astro-ph.HE\]](#).

- 2: J. Davies, **M. Meyer**, and G. Cotter,
Relevance of Jet Magnetic Field Structure for Blazar ALP Searches,
Submitted to PRD 2020, arXiv: [2011.08123 \[astro-ph.HE\]](#).
- 1: *H. Abdalla et al. (CTA Consortium, including **M. Meyer**),
Sensitivity of the Cherenkov Telescope Array for probing cosmology and fundamental physics with gamma-ray propagation,
Submitted to JCAP 2020, arXiv: [2010.01349 \[astro-ph.HE\]](#).

White Papers

- 4: E. Armengaud et al. (including **M. Meyer**),
Physics potential of the International Axion Observatory (IAXO),
JCAP, Vol. 2019, No. 6, 047, p. 047, 2019, arXiv: [1904.09155 \[hep-ph\]](#)
- 3: P. S. Ray et al. (including **M. Meyer**),
STROBE-X: X-ray Timing and Spectroscopy on Dynamical Timescales from Microseconds to Years,
ArXiv e-prints Mar. 2019, arXiv: [1903.03035 \[astro-ph.IM\]](#)
- 2: A. Drlica-Wagner et al. (including **M. Meyer**),
Probing the Fundamental Nature of Dark Matter with the Large Synoptic Survey Telescope,
ArXiv e-prints 2019, arXiv: [1902.01055 \[astro-ph.CO\]](#)
- 1: The CTA Consortium, (including **M. Meyer**),
Science with the Cherenkov Telescope Array,
World Scientific 2018, arXiv: [1709.07997 \[astro-ph.HE\]](#)

Conference Proceedings

- 23: H. Vogel, R. Laha, and **M. Meyer**,
Diffuse axion-like particle searches,
PoS, Vol. NOW2018, p. 091, 2019, arXiv: [1712.01839 \[hep-ph\]](#)
- 22: M. Zacharias et al. (including **M. Meyer**),
The VHE Gamma-Ray View of the FSRQ PKS 1510-089,
ArXiv e-prints 2019, arXiv: [1903.08535 \[astro-ph.HE\]](#).
- 21: *F. Gaté et al. (CTA Consortium, including **M. Meyer**),
Studying cosmological γ -ray propagation with the Cherenkov Telescope Array,
PoS, Vol. ICRC2017 2017, arXiv: [1709.04185 \[astro-ph.HE\]](#).
- 20: M. Wood, J. Biteau, R. Caputo, M. Di Mauro, and **M. Meyer** (Fermi-LAT Collaboration),
Preliminary Results of the Fermi High-Latitude Extended Source Catalog,
PoS 2017, arXiv: [1709.06213 \[astro-ph.HE\]](#).
- 19: *R. Caputo, **M. Meyer**, and M. Sánchez-Conde (AMEGO Team),
AMEGO: Dark Matter Prospects,
PoS, Vol. ICRC2017, p. 910, 2017.
- 18: C. Romoli et al. (HESS Collaboration, including **M. Meyer**),
Observation of the extremely bright flare of the FSRQ 3C279 with H.E.S.S. II,
PoS, Vol. ICRC2017 2017, arXiv: [1708.00882 \[astro-ph.HE\]](#).
- 17: ***M. Meyer** for the Fermi-LAT Collaboration,
Searches for Axionlike Particles Using Gamma-Ray Observations,
Proceedings of 12th Patras Workshop on Axions, WIMPs, and WISPs 2016, arXiv: [1611.07784 \[astro-ph.HE\]](#).
- 16: J. Conrad, **M. Meyer**, and D. Montanino,
Axion-Like particles from extragalactic High Energy sources,
Journal of Physics Conference Series, Vol. 718, No. 5, 052026, p. 052026, 2016.
- 15: A. Abchiche et al. (CTA Consortium, including **M. Meyer**),
CTA Contributions to the 34th International Cosmic Ray Conference (ICRC2015),

ArXiv e-prints 2015, arXiv: [1508.05894 \[astro-ph.HE\]](#).

14: *M. Meyer,

Modelling gamma-ray-axion-like particle oscillations in turbulent magnetic fields: relevance for observations with Cherenkov telescopes,

Proceedings of 10th Patras Workshop on Axions, WIMPs, and WISPs 2014, arXiv: [1412.2492 \[astro-ph.HE\]](#).

13: *M. Meyer and D. Horns,

Impact of oscillations of photons into axion-like particles on the very-high energy gamma-ray spectrum of the blazar PKS1424+240,

Proceeding for the European Physical Society Conference on High Energy Physics 2013, arXiv: [1310.2058 \[astro-ph.HE\]](#).

12: D. Horns and M. Meyer,

Pair-production opacity at high and very-high gamma-ray energies,

Proceedings of the 9th Patras Workshop Sept. 2013, arXiv: [1309.3846 \[astro-ph.HE\]](#).

11: O. Abril et al. (CTA Consortium, including M. Meyer),

CTA contributions to the 33rd International Cosmic Ray Conference (ICRC2013),

ArXiv e-prints July 2013, arXiv: [1307.2232 \[astro-ph.HE\]](#).

10: M. Raue and M. Meyer,

How recent limits on the extragalactic background light constrain the star formation history,

American Institute of Physics Conference Series, Vol. 1505, ed. by F. A. Aharonian, W. Hofmann, and F. M. Rieger, pp. 610–613, Dec. 2012.

9: *M. Meyer, M. Raue, D. Mazin, and D. Horns,

Limits on the extragalactic background light in the Fermi era,

American Institute of Physics Conference Series, Vol. 1505, ed. by F. A. Aharonian, W. Hofmann, and F. M. Rieger, pp. 602–605, Dec. 2012.

8: *M. Meyer, D. Horns, and M. Raue,

Indications for a low opacity universe from Fermi-LAT data,

American Institute of Physics Conference Series, Vol. 1505, ed. by F. A. Aharonian, W. Hofmann, and F. M. Rieger, pp. 598–601, Dec. 2012.

7: G. Giavitto et al. (including M. Meyer),

VHE gamma-ray measurements of the Crab nebula and pulsar by MAGIC,

American Institute of Physics Conference Series, Vol. 1505, ed. by F. A. Aharonian, W. Hofmann, and F. M. Rieger, pp. 301–304, Dec. 2012.

6: *M. Meyer, D. Horns, L. Maccione, A. Mirizzi, D. Montanino, and M. Roncadelli,

The effect of photon-axion-like particle conversions in galaxy clusters on very high energy γ -ray spectra,

Proceedings of the 8th Patras Workshop on Axions, WIMPs and WISPs 2012, arXiv: [1211.6408 \[astro-ph.HE\]](#).

5: *M. Meyer, D. Horns, and M. Raue,

Revisiting the Indication for a low opacity Universe for very high energy gamma-rays,

Proceedings of the 8th Patras Workshop on Axions, WIMPs and WISPs Nov. 2012, arXiv: [1211.6405 \[astro-ph.HE\]](#).

4: *M. Meyer, D. Horns, and L. Maccione,

Signatures of axion-like particles from the conversions of gamma-rays in intra-cluster magnetic fields,

6, ed. by K. Zioutas and M. Schumann, p. 6, July 2012.

3: *M. Meyer, D. Horns, and M. Raue,

Indications for a low opacity Universe at high and very high energies,

5, ed. by K. Zioutas and M. Schumann, p. 5, July 2012.

2: *M. Meyer and D. Horns,

On the transparency of the universe,

Ed. by M. Raue, T. Kneiske, D. Horns, D. Elsaesser, and P. Hauschildt, p. 11, 2010.

1: *M. Meyer, D. Horns, and H. S. Zechlin,

Cross Calibration of Imaging Air Cherenkov Telescopes with Fermi,

The 2009 Fermi Symposium, eConf Proceedings C091122 Dec. 2009, arXiv: [0912.3754 \[astro-ph.IM\]](#).