

LIST OF PUBLICATIONS

PEER-REVIEWED SCIENTIFIC JOURNAL ARTICLES

- 1) **Cosmic Rays in a Galactic Breeze**
A. M. Taylor and G. Giacinti,
astro-ph/1607.08862
- 2) **Evidence for a Local “Fog” of Sub-Ankle UHECR**
R. Liu, A. M. Taylor, X. Wang and F. A. Aharonian,
Accepted for publication in PRD, astro-ph/1603.03223, 1 citation
- 3) **Cosmic Rays Beyond the Knees**
A. M. Taylor,
Nature 531, 4344 (2016)
- 4) **Indications of Negative Evolution for the Sources of the Highest Energy Cosmic Rays**
A. M. Taylor, M. Ahlers and D. Hooper,
Phys.Rev. D92 (2015) 6, 063011, astro-ph/1505.06090, 10 citations
- 5) **Giant Shocks in the Fermi Bubbles and the Origin of the Microwave Haze**
R. Crocker, G. Bicknell, A. M. Taylor and E. Carretti,
Astrophys.J. 808 (2015) 2, 107, astro-ph/1412.7510, 7 citations
- 6) **Tentative Evidence for Relativistic Electrons Generated by the Jet of the Young Sun-like Star DG Tau**
R. E. Ainsworth, A. M. M. Scaife, T. P. Ray, A. M. Taylor, D. A. Green and J. V. Buckle,
ApJ Letters, Vol. 792, Iss. 1, article id. L18, 5, astro-ph/1408.1892, 6 citations
- 7) **Parametrization of gamma-ray production cross-sections for pp interactions in a broad proton energy range from the kinematic threshold to PeV energies**
E. Kafexhiu, F. Aharonian, A. M. Taylor and G. S. Vila,
Phys.Rev. D90 (2014) no.12, 123014, astro-ph/1406.7369, 15 citations
- 8) **A Galactic Halo Origin of the Neutrinos Detected by IceCube**
A. M. Taylor, S. Gabici and F. Aharonian,
Phys.Rev. D89 (2014) 10, 103003, astro-ph/1403.3206, 47 citations
- 9) **Search for Extended γ -ray Emission around AGN with H.E.S.S. and Fermi-LAT for the H. E. S. S. Collaboration (A. Abramowski et al.),**
Astronomy & Astrophysics, Vol. 562, A145 (2014), astro-ph/1401.2915, 11 citations
- 10) **UHECR Composition Models**
A. M. Taylor,
Astropart.Phys. 54 (2014) 48-53, astro-ph/1401.0199, 24 citations
- 11) **Constraints on the source of ultra-high energy cosmic rays using anisotropy vs chemical composition**
R. Liu, A. M. Taylor, M. Lemoine, X. Wang, E. Waxman,
Astrophys.J. 776 (2013) 88, astro-ph/1308.5699, 6 citations
- 12) **Measuring the correlation length of intergalactic magnetic fields from observations of gamma-ray induced cascades**
A. Neronov, A. M. Taylor, C. Tchernin, Ie. Vovk,
Astronomy & Astrophysics, Vol. 554 (2013), astro-ph/1307.2753, 9 citations
- 13) **Detection Potential of the KM3NeT Detector for High-Energy Neutrinos from the Fermi Bubbles**

- for the KM3NeT Collaboration (S. Adrian-Martinez et al.)
Astropart.Phys. 42 7-14 (2013), astro-ph/1208.1226, 31 citations
- 14) **Ensemble Fluctuations of the Flux and Nuclear Composition of Ultra-High Energy Cosmic Ray Nuclei**
M. Ahlers, L. A. Anchordoqui, A. M. Taylor,
Physical Review D, vol. 87, Issue 2 (2013), astro-ph/1209.5427, 9 citations
 - 15) **On the excess of ultra-high energy cosmic rays in the direction of Centaurus A**
R. Liu, X. Wang, W. Wang, and A. M. Taylor,
ApJ., Vol. 755, Iss. 2, astro-ph/1206.3907, 6 citations
 - 16) **Very-high-energy gamma-ray emission from high-redshift blazars**
A. Neronov, D. Semikoz, I. Vovk and A. M. Taylor,
Accepted for publication, astro-ph/1207.1962, 8 citations
 - 17) **Fermi/LAT observations of 1ES 0229+200: implications for extragalactic magnetic fields and background light**
I. Vovk, A. M. Taylor, D. Semikoz, and A. Neronov,
ApJ. Letters, Vol. 747, L14 (2012), astro-ph/1112.2534, 57 citations
 - 18) **The need for a local source of UHE CR nuclei**
A. M. Taylor, M. Ahlers, F. A. Aharonian,
Phys. Rev. D, Vol. 84, Iss. 10 (2011), astro-ph/1107.2055, 43 citations
 - 19) **Stochastic acceleration and the evolution of spectral distributions in SSC sources: A self consistent modeling of blazars' flares**
A. Tramacere and E. Massaro, A. M. Taylor,
ApJ., Vol. 739, Iss. 2, 66 (2011), astro-ph/1107.1879, 35 citations
 - 20) **Very hard gamma-ray emission from a flare of Mrk 501**
A. Neronov, D. Semikoz and A. M. Taylor,
Astronomy & Astrophysics, Vol. 541, astro-ph/1104.2801, 21 citations
 - 21) **EGMF Constraints from Simultaneous GeV-TeV Observations of Blazars**
A. M. Taylor, I. Vovk and A. Neronov,
Astronomy & Astrophysics, Vol. 529, astro-ph/1101.0932, 107 citations
 - 22) **Analytic Solutions of Ultra-High Energy Cosmic Ray Nuclei Revisited**
M. Ahlers and A. M. Taylor,
Phys. Rev. D 82, 123005 (2010), astro-ph/1010.3019, 16 citations
 - 23) **Cosmogenic photons as a test of ultra-high energy cosmic ray composition**
D. Hooper, A. M. Taylor, and S. Sarkar,
Astropart.Phys.34.340-343 (2011), astro-ph/1007.1306, 28 citations
 - 24) **Limitations on the Photo-disintegration Process as a Source of VHE Photons**
F. Aharonian and A. M. Taylor,
Astropart.Phys.34.258-266, (2010), astro-ph/1005.3230, 5 citations
 - 25) **On The Heavy Chemical Composition of the Ultra-High Energy Cosmic Rays**
D. Hooper and A. M. Taylor,
Astropart.Phys.33:151-159, (2010), astro-ph/0910.1842, 41 citations
 - 26) **Identifying Nearby UHECR Accelerators using UHE (and VHE) Photons**
A. M. Taylor, J. A. Hinton, P. Blasi, and M. Ave,
Phys. Rev. Lett. 103, 051102 (2009), astro-ph/0904.3903, 8 citations
 - 27) **Stochastic particle acceleration in the lobes of giant radio galaxies**
S O'Sullivan, B. Reville, and A. M. Taylor,
Mon. Not. R. Astron. Soc. 400, 248257 (2009), astro-ph/0903.1259, 43 citations
 - 28) **Planck-scale Lorentz Violation Constrained by Ultra-High-Energy Cosmic Rays**
L. Maccione, A. M. Taylor, D. M. Mattingly, S. Liberati,

- JCAP 0904:022 (2009), astro-ph/0902.1756, 62 citations
- 29) **The Spectral Shape and Photon Fraction as Signatures of the GZK-Cutoff**
A. M. Taylor and F. Aharonian,
Phys. Rev. D 79, 083010 (2009), astro-ph/0811.0396, 16 citations
- 30) **The Cosmological Consequence of an Obscured AGN Population on the Radiation Efficiency**
A. Martinez-Sansigre and A. M. Taylor,
Astrophys.J.692:964-972 (2009), astro-ph/0810.3920, 18 citations
- 31) **The Diffuse Neutrino Flux from the Inner Galaxy: Constraints from Very High Energy Gamma-Ray Observations**
S. Gabici, A. M. Taylor, R. J. White, S. Casanova, F.A. Aharonian,
Astropart.Phys.30:167-218 (2008), astro-ph/0806.2459, 12 citations
- 32) **The Intergalactic Propagation of Ultra-High Energy Cosmic Ray Nuclei: An Analytic Approach**
D. Hooper and S. Sarkar, A. M. Taylor,
Phys.Rev.D77:103007 (2008), astro-ph/0802.1538, 34 citations
- 33) **Predictions for the Cosmogenic Neutrino Flux in Light of New Data from the Pierre Auger Observatory**
L. Anchordoqui, H. Goldberg, D. Hooper, S. Sarkar, A. M. Taylor,
Phys.Rev.D76:123008 (2007), astro-ph/0709.0734, 70 citations
- 34) **High-Energy Neutrinos from Astrophysical Accelerators of Cosmic Ray Nuclei**
L. Anchordoqui, D. Hooper, S. Sarkar, A. M. Taylor,
Astropart.Phys.29:1-13 (2008), astro-ph/0703001, 54 citations
- 35) **The Intergalactic Propagation of Ultra-High Energy Cosmic Ray Nuclei**
D. Hooper, S. Sarkar, A. M. Taylor,
Astropart. Phys. 27:199-212 (2007), astro-ph/0608085, 66 citations
- 36) **Determining Supersymmetric Parameters With Dark Matter Experiments**
D. Hooper and A. M. Taylor,
JCAP 0703:017 (2007), hep-ph/0607086, 19 citations
- 37) **The Impact of Heavy Nuclei on the Cosmogenic Neutrino Flux**
D. Hooper, A. M. Taylor, and S. Sarkar,
Astropart. Phys. 23:11-17 (2005), astro-ph/0407618, 88 citations

H.E.S.S. COLLABORATION PUBLICATIONS

- 38) **Acceleration of petaelectronvolt protons in the Galactic Centre** Nature 531 (2016) 476, 3 citations
- 39) **Detailed spectral and morphological analysis of the shell type SNR RCW 86** In Press, astro-ph:1601.04461, 2 citations
- 40) **H.E.S.S. detection of TeV emission from the interaction region between the supernova remnant G349.7+0.2 and a molecular cloud (Corrigendum)**
Astronomy & Astrophysics, 574 (2015), C1, 4 citations
- 41) **Discovery of variable VHE -ray emission from the binary system 1FGL J1018.6-5856**
Astronomy & Astrophysics, 577 (2015), A131, 6 citations
- 42) **The 2012 Flare of PG 1553+113 Seen with H.E.S.S. and Fermi-LAT**
The Astrophysical Journal, 802 (2015), 1, 65, 8 citations
- 43) **H.E.S.S. reveals a lack of TeV emission from the supernova remnant Puppis A**
Astronomy & Astrophysics, 575 (2015), A81, 2 citations

- 44) **Constraints on an Annihilation Signal from a Core of Constant Dark Matter Density around the Milky Way Center with H.E.S.S.**
Physical Review Letters, 114 (2015), Issue 8, id.081301, 10 citations
- 45) **Probing the gamma-ray emission from HESS J1834-087 using H.E.S.S. and Fermi LAT observations**
Astronomy & Astrophysics, 574 (2015), A27, 7 citations
- 46) **The exceptionally powerful TeV -ray emitters in the Large Magellanic Cloud**
Science, Volume 347, Issue 6220, pp. 406-412 (2015), 14 citations
- 47) **Discovery of the VHE gamma-ray source HESS J1832-093 in the vicinity of SNR G22.7-0.2**
Monthly Notices of the Royal Astronomical Society, Volume 446, Issue 2 (2015), 4 citations
- 48) **The high-energy gamma-ray emission of AP Librae**
Astronomy & Astrophysics, 573 (2015), id.A31, 5 citations
- 49) **Gamma-Ray Flaring Activity from the Gravitationally Lensed Blazar PKS 1830-211 Observed by Fermi LAT**
The Astrophysical Journal, 799 (2015), Issue 2, article id. 143, 12 citations
- 50) **Search for TeV Gamma-ray Emission from GRB 100621A, an extremely bright GRB in X-rays, with H.E.S.S**
Astronomy & Astrophysics, Volume 565, 05/2014, A16, 19 citations
- 51) **TeV Gamma-ray observations of the young synchrotron-dominated SNRs G1.9+0.3 and G330.2+1.0 with H.E.S.S.**
Mon. Not. R. Astron. Soc., 441 790H (2014), 4 citations
- 52) **Flux upper limits for 47 AGN observed with H.E.S.S. in 2004-2011**
Astronomy & Astrophysics 564A 9H (2014), 3 citations
- 53) **HESS J1640-465 - an exceptionally luminous TeV gamma-ray supernova remnant**
Mon. Not. R. Astron. Soc., 439 2828A (2014), 8 citations
- 54) **H.E.S.S. Observations of the Crab during its March 2013 GeV Gamma-Ray Flare**
Astronomy & Astrophysics, Volume 562, 02/2014, id.L4, 5 pp, 7 citations
- 55) **HESS J1818-154, a new composite supernova remnant discovered in TeV gamma rays and X-rays**
Astronomy & Astrophysics 562 (2014) A40, 3 citations

PUBLISHED PROCEEDINGS

- 56) **A Parameterisation of γ -ray Production Cross-Sections for pp Interactions in a Broad Energy Range**
SUGAR15, Geneva, Switzerland (2015)
- 57) **A Galactic Halo Origin of the Neutrinos Detected by IceCube**
NOW2014, Otranto, Italy (2014)
- 58) **Multi-Messenger Aspects: Composition, Propagation, & Acceleration**
ISVHECRI14, Geneva, Switzerland (2014)
- 59) **The Need For Hard Spectra Sources of Nearby Heavy Cosmic Rays**
HEPRO 2013, Heidelberg, Germany (2013)
- 60) **Sensitivity of JEM-EUSO to Ensemble Fluctuations in the Ultra-High Energy Cosmic Ray Flux**
33rd International Cosmic Ray Conference (ICRC 2013), Rio de Janeiro, Brazil
- 61) **Extragalactic Background Light and Extragalactic Magnetic Fields**
Gamma2012, Heidelberg, Germany (2012)

- 62) **The Need For Hard Spectra Sources of Nearby Heavy Cosmic Rays**
Future Directions Symposium, Geneva, Switzerland (2012)
- 63) **The CR Connection: UHE Primaries and Secondaries from UHECR Sources**
ICATPP, Como, Italy (2010)
- 64) **The CR Connection(s): UHE Neutrinos and Photons from UHECR Sources**
Extragalactic Sources Workshop, Heidelberg (2009)
- 65) **Ultra High Energy Cosmic Ray, Neutrino, and Photon Propagation and the Multi-Messenger Approach**
3rd South American Cosmic Ray School, Arequipa, Peru (2008)
- 66) **Revisiting the diffuse neutrino flux from the inner Galaxy using new constraints from very high energy gamma-ray observations**
VLVnT08, Toulouse, France (2008)
- 67) **A reinvestigation into the diffuse neutrino flux from the inner Galaxy in light of new very high energy gamma-ray observations**
Gamma08, Heidelberg, Germany (2008)
- 68) **High Energy Neutrinos from Accelerators of Cosmic Ray Nuclei**
HEPRO, Dublin, Ireland (2007)
- 69) **The Cosmogenic Neutrino Flux and Its Dependence on the Cosmic Ray Primary Composition** Cosmology, Galaxy Formation and Astroparticle Physics on the pathway to the SKA, Oxford, UK (2006)