

## ***Publications in Peer-Reviewed Journals***

According to NASA ADS my publications have **1,482** citations and h-index **22** (as of 21/09/2020). The following list does not include conference proceedings.

1. Hakobyan, H., **P.M.**, Spitkovsky, A., Sironi, L., *Secondary Energization in Compressing Plasmoids during Magnetic Reconnection*, 2020, submitted to ApJ (arXiv:2006.12530)
2. **P.M.**, Oikonomou, F., Mastichiadis, A., Murase, K., Padovani, P., Vasilopoulos, G., Giommi, P., *Comprehensive Multimessenger Modeling of the Extreme Blazar 3HSP J095507.9+355101 and Predictions for IceCube*, 2020, ApJ, 899, 2 (arXiv:2005.07218)
3. **P.M.**, Beniamini, P., Vasilopoulos, G., Giannios, D., Barniol Duran, R., *Deciphering the properties of the central engine in GRB collapsars*, 2020, MNRAS, 496, 3 (arXiv:2006.07482)
4. Mastichiadis, A., Florou, I., Kefala, E., Boula, S., **P.M.**, *A roadmap to hadronic supercriticalities: a comprehensive study of the parameter space for high-energy astrophysical sources*, 2020, MNRAS, 495, 2 (arXiv:2003.06956)
5. Lioudakis, I. & **P.M.**, *Proton Synchrotron Gamma-Rays and the Energy Crisis in Blazars*, 2020, ApJ Letters, 893, 1 (arXiv:2003.10460)
6. MAGIC Collaboration et al., *Unravelling the complex behavior of Mrk 421 with simultaneous X-ray and VHE observations during an extreme flaring activity in April 2013*, 2020, ApJ, (arXiv:2001.08678)
7. Beniamini, P., Barniol Duran, R., **P.M.**, Giannios, D., *Ready, set, launch: time interval between BNS merger and short GRB jet formation*, 2020, ApJ Letters, 895, 2 (arXiv:2001.00950)
8. Zhang, B. T., **P.M.**, Murase, K., Oikonomou, F., *A Neutral Beam Model for High-Energy Neutrino Emission from the Blazar TXS 0506+056*, 2020, ApJ, 889, 2 (arXiv:1910.11464)
9. Christie, I. M., **P.M.**, Sironi, L., Giannios, D., *Inter-Plasmoid Compton Scattering Can Power High-Energy Emission in BL Lacs*, 2020, MNRAS, 492, 1 (arXiv:1908.02764v2)
10. **P.M.**, Murase, K., Santander, M., Buson, S., et al., *Multi-Epoch Modeling of TXS 0506+056 and Implications for Long-Term High-Energy Neutrino Emission*, 2020, ApJ, 891, 2 (arXiv:1911.04010)
11. Zhang, H., Christie, I., **P.M.**, Rueda-Becerril, J. M., Giannios, D., *Inverse Compton Signatures of Gamma-Ray Burst Afterglows*, 2020, MNRAS, 496, 1 (arXiv:1910.14049)
12. Xue, R., Liu, R.-Y., **P.M.**, Oikonomou, F., Wang, Z.-R., Wang, K., Wang, X.-Y., *A two-zone model for blazar emission: implications for TXS 0506+056 and the neutrino event IceCube-170922A*, 2019, ApJ, 886, 23 (arXiv:1908.10190)
13. **P.M.**, Yuan, Y., Chen, A. C., Mastichiadis, A., *Inverse Compton Cascades in Pair-Producing Gaps: Effects of Triplet Pair Production*, 2019, ApJ, 883, 66 (arXiv:1907.03175)
14. Vasilopoulos, G., **P.M.**, Koliopanos, F., et al., *NGC 300 ULX1: spin evolution, super-Eddington accretion, and outflows*, 2019, MNRAS, 488, 4 (arXiv:1905.03740)
15. **P.M.**, Sironi, L., Spitkovsky, A., Giannios, D., *Relativistic magnetic reconnection in electron-positron-proton plasmas: implications for jets of active galactic nuclei*, 2019, ApJ, 880, 1 (arXiv:1901.06998)
16. Padovani, P., Oikonomou, F., **P.M.** et al., *TXS 0506+056, the first cosmic neutrino source, is not a BL Lac*, 2019, MNRAS Letters, 484, 1 (arXiv:1901.06998)
17. Christie, I. M., **P.M.**, Sironi, L., Giannios, D., *Radiative signatures of plasmoid-dominated reconnection in blazar jets*, 2019, MNRAS, 482, 1 (arXiv:1807.08041)
18. Beniamini, P., **P.M.**, Barniol-Duran, R., Giannios, D., *A lesson from GW170817: most neutron star mergers result in tightly collimated successful GRB jets*, 2018, MNRAS, 483, 1 (arXiv:1808.04831)
19. **P.M.** & Sironi, L., *The steady growth of the high-energy spectral cutoff in relativistic magnetic reconnection*, 2018, MNRAS, 481, 4 (arXiv:1808.00966)
20. Dong, L., **P.M.**, Giannios, D., *Extreme scattering events from axisymmetric plasma lenses*, 2018, MNRAS, 481, 2 (arXiv:1809.00005)
21. Boula, S., **P.M.**, Mastichiadis, A., *On the connection of radio and  $\gamma$ -ray emission in blazars*, 2018, Galaxies, 7, 1 (arXiv:1901.08793)

22. Murase, K., Oikonomou, F., **P.M.**, *Blazar flares as an origin of high-energy cosmic neutrinos?*, 2018, ApJ, 865, 2 (arXiv:1807.04748)
23. Keivani, A., Murase, K., **P.M.** et al., *A multimessenger picture of the flaring blazar TXS 0506+056*, 2018, ApJ, 864, 1 (arXiv:1807.04537)
24. **P.M.** & Mastichiadis, A., *Patterns of variability in supercritical hadronic systems*, 2018, MNRAS, 477, 3 (arXiv:1804.00188)
25. Meyer, E. T., **P.M.**, Georganopoulos, M., et al., *Detection of an optical/UV jet and multiple spectral components in M 84*, 2018, ApJ, 860, 1 (arXiv:1804.05122)
26. **P.M.**, Christie, I., Sironi, L., Giannios, D., *Plasmoid statistics in relativistic magnetic reconnection*, 2018, MNRAS, 475, 3 (arXiv:1710.00724)
27. Vasilopoulos, G., Maitra, C., Haberl, F. et al., *Identification of two new HMXBs in the LMC: a  $\sim 2013$  s pulsar and a probable SFXT*, 2018, MNRAS, 475, 1 (arXiv:1712.00096)
28. **P.M.**, Vasilopoulos, G., Christie, I. et al., *X-ray mapping of the stellar wind in the binary PSR J2032+4127 / MT91 213*, 2018, MNRAS Letters, 474, 1 (arXiv:1710.05042)
29. **P.M.**, Barniol Duran, R., Giannios, D., *Collapsar Gamma-Ray Bursts: how the luminosity function dictates the duration distribution*, 2017, MNRAS, 472, 3 (arXiv:1707.01914)
30. **P.M.**, Coenders, S., Vasilopoulos, G. et al., *Point-source and diffuse high-energy neutrino emission from Type II supernovae*, 2017, MNRAS, 470, 2 (arXiv:1705.06752)
31. Christie, I., **P.M.**, Mimica, P., Giannios, D., *Radio emission from Sgr A\*: pulsar transits through the accretion disc*, 2017, MNRAS Letters, 468, 1 (arXiv:1701.08804)
32. **P.M.**, Nalewajko, K., Hayashida, M., Mastichiadis, A., *A hadronic minute-scale GeV flare from quasar 3C 279?*, 2017, MNRAS Letters, 467, 1 (arXiv:1612.05699)
33. **P.M.**, Vasilopoulos, G., Giannios, D., *The TeV emission of Ap Librae: a hadronic interpretation and prospects for CTA*, 2017, MNRAS, 464, 2 (arXiv:1608.07300)
34. **P.M.**, Giannios, D. Sironi, L., *Blazar flares powered by plasmoids in relativistic reconnection*, MNRAS, 462, 3 (arXiv:1606.07447)
35. Sironi, L., Giannios, D., **P.M.**, *Plasmoids in relativistic reconnection, from birth to adulthood: first they grow, then they go*, 2016, MNRAS, 462, 1 (arXiv:1605.02071)
36. **P.M.**, Kamble, A., Sironi, L., *Radio synchrotron emission from secondary electrons in interaction-powered supernovae*, 2016, MNRAS, 460, 1 (arXiv:1603.00891)
37. Christie, I. M., **P.M.**, Mimica, P., Giannios, D., *Modelling accretion disc and stellar wind interactions: the case of Sgr A\**, 2016, MNRAS, 459, 3 (arXiv:1601.07432)
38. **P.M.** & Dermer, C. D., *Properties of blazar jets defined by an economy of power*, 2016, ApJL, 825, 1
39. **P.M.**, Coenders, S., Dimitrakoudis, S., *Time-dependent neutrino emission from Mrk 421 during flares and predictions for IceCube*, 2016, APh, 80 (arXiv:1603.06954)
40. Vasilopoulos, G. & **P.M.**, *The X-ray dust-scattered rings of the black hole low-mass X-ray binary V404 Cyg*, 2016, MNRAS, 455, 4 (arXiv:1511.00932)
41. **P.M.**, Piran, T., Mastichiadis, A., *Spectral signatures of compact sources in the inverse Compton catastrophe limit*, 2015, MNRAS, 452, 3 (arXiv:1507.02710)
42. Padovani, P., **P.M.**, Giommi, P., Resconi, E., *A simplified view of blazars: the neutrino background*, 2015, MNRAS, 452, 2 (arXiv:1506.09135)
43. **P.M.** & Dimitrakoudis, S., *Constraints of flat spectrum radio quasars in the hadronic model: the case of 3C 273*, 2015, MNRAS, 432, 2 (arXiv:1506.05723)
44. Sironi, L., **P.M.**, Giannios, D., *Relativistic jets shine through shocks or magnetic reconnection?*, 2015, MNRAS, 450, 1 (arXiv:1502.01021)
45. Hovatta, T., **P.M.**, Richards, J. L. et al., *A combined radio and GeV  $\gamma$ -ray view of the 2012 and 2013 flares of Mrk 421*, 2015, MNRAS, 448, 4 (arXiv:1501.07407)

46. **P.M.**, Dimitrakoudis, S., Padovani, P. et al., *Photohadronic origin of  $\gamma$ -ray BL Lac emission: implications for IceCube neutrinos*, 2015, MNRAS, 448, 3 (arXiv:1501.07115)
47. **P.M.** & Mastichiadis, A., *Bethe-Heitler emission in BL Lacs: filling the gap between X-rays and gamma-rays*, 2015, MNRAS, 447, 1 (arXiv: 1411.1908)
48. **P.M.**, Giannios, D., Dimitrakoudis, S. *Implications of a PeV neutrino spectral cut-off in gamma-ray burst models*, 2014, MNRAS, 445, 1 (arXiv:1405.2091)
49. **P.M.**, Dimitrakoudis, S., Mastichiadis, A., Giannios D., *Hadronic supercriticality as a trigger for  $\gamma$ -ray burst emission*, 2014, MNRAS, 444, 3 (arXiv: 1407.2915)
50. **P.M.**, *Time-dependent modelling of PKS 2155-304 in a low state*, 2014, A&A, 571, 83 (arXiv: 1409.3739)
51. **P.M.**, *The role of hadronic cascades in GRB models of efficient neutrino production*, 2014, MNRAS, 442, 4 (arXiv: 1405.7669)
52. Dimitrakoudis, S., **P.M.**, Mastichiadis, A., *Self-consistent neutrino and UHE cosmic ray spectra from Mrk 421*, 2014, APh, 54 (arXiv:1310.7923)
53. **P.M.**, Lefa, E., Dimitrakoudis, S., Mastichiadis, A., *One-zone synchrotron self-Compton model for the core emission of Centaurus A revisited*, 2013, A&A, 562, 12 (arXiv:1311.1119)
54. Mastichiadis, A., **P.M.**, Dimitrakoudis, S., *Mrk 421 as a case study for TeV and X-ray variability in leptohadronic models*, 2013, MNRAS, 434, 3 (arXiv:1304.2957)
55. **P.M.**, Arfani, D., Mastichiadis, A., *Spontaneously quenched  $\gamma$ -ray spectra from compact sources*, 2013, A&A, 557, 48 (arXiv:1307.2406)
56. **P.M.** & Mastichiadis, A., *On proton synchrotron blazar models: the case of quasar 3C 279*, 2012, MNRAS, 426, 1 (arXiv: 1207.5227)
57. **P.M.** & Mastichiadis, A., *Temporal signatures of leptohadronic feedback mechanisms in compact sources*, 2012, MNRAS, 421, 3 (arXiv: 1201.2091)
58. **P.M.** & Mastichiadis, A., *Implications of automatic photon quenching on compact gamma-ray sources*, 2011, A&A, 532, 11 (arXiv:1105.3852)
59. **P.M.**, Mastichiadis, A., Piran, T., *Effects of a low electron distribution cutoff on multiwavelength spectra and light curves of GRB afterglows*, 2011, A&A, 531, 76 (arXiv: 1105.0154)
60. **P.M.** & Mastichiadis, A., *On the multiwavelength emission from Gamma Ray Burst afterglows*, 2009, A&A, 507, 2 (arXiv:0909.0208)

## ***Science White Papers***

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List of white paper prepared for the Decadal Survey on Astronomy and Astrophysics (Astro2020).

1. Ajello, M., et al., *The MeV Background*, 2019, BAAS, 51, 3
2. Ajello, M., et al., *Supermassive black holes at high redshifts*, 2019, BAAS, 51, 3 (arXiv:1903.06106)
3. McEnery, J., et al., *All-sky Medium Energy Gamma-ray Observatory: Exploring the Extreme Multimessenger Universe*, 2019, BAAS, 51, 7 (arXiv:1907.07558)
4. Hantao, J., et al., *Major Scientific Challenges and Opportunities in Understanding Magnetic Reconnection and Related Explosive Phenomena throughout the Universe*, 2019, BAAS, 51, 3
5. Santander, M., et al., *A Unique Messenger to Probe Active Galactic Nuclei: High-Energy Neutrinos*, 2019, BAAS, 51, 3 (arXiv:1903.04447)
6. Rani, B., et al., *Multi-Physics of AGN Jets in the Multi-Messenger Era*, 2019, BAAS, 51, 3 (arXiv:1903.04504)
7. Rani, B., et al., *High-Energy Polarimetry - a new window to probe extreme physics in AGN jets*, 2019, BAAS, 51, 3 (arXiv:1903.04607)
8. Venters, T. M., Guiriec, S., Lien, A. Y., et al., *Energetic Particles of Cosmic Accelerators II: Active Galactic Nuclei and Gamma-ray Bursts*, 2019, BAAS, 51, 3 (arXiv:1903.04639)
9. Ojha, R., et al., *Neutrinos, Cosmic Rays and the MeV Band*, 2019, BAAS, 51, 3 (arXiv:1903.05765)
10. Ray, P. S., et al., *STROBE-X: X-ray Timing and Spectroscopy on Dynamical Timescales from Microseconds to Years*, 2019 (arXiv:1903.03035)