

LORENZO SIRONI

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**Field of
Specialization** High-Energy Astrophysics
Plasma Astrophysics

**Academic
Training** Research Scientist, CCA, 2023 – present
Astronomy Department, Columbia University (USA)
Tenured Associate Professor, 2024 – present
Tenure-Track Associate Professor, 2021 – 2024
Tenure-Track Assistant Professor, 2016 – 2021
Institute for Theory and Computation (ITC), Harvard University (USA)
ITC Post-Doctoral Fellow, 2015 – 2016
NASA Einstein Post-Doctoral Fellow, 2012 – 2015
Department of Astrophysical Sciences, Princeton University (USA)
Ph.D., November 2011
Advisor: Prof. Anatoly Spitkovsky
Thesis: *Particle Acceleration and Nonthermal Emission in Relativistic Astrophysical Shocks*

**Mentoring:
Students** Advisor of Ph.D. student Stanislav DeLaurentiis **2026 – present**
Thesis Project: *Foundation Models for Plasma Astrophysics*
Advisor of Ph.D. student Nilay Mancini **2025 – present**
Thesis Project: *Hadronic Acceleration and Emission in Black Hole Magnetospheres*
Advisor of Ph.D. student Valeriia Rohoza **2024 – present**
Thesis Project: *The Reconnection Model of Black Hole Coronae*
Advisor of Ph.D. student Anthony Chow **2022 – 2026**
Thesis: *Instabilities and Mixing at Black Hole Jet Boundaries*
Co-Advisor of Ph.D student Ryan Golant (→ U. Chicago) **2022 – 2026**
Thesis: *Turbulent Magnetogenesis in Cosmic Voids*
Advisor of Ph.D. student Jorge Cortes (→ UCSC) **2020 – 2024**
Thesis: *Global Kinetic Modeling of the Intrabinary Shock in Spider Pulsars*
Co-Advisor of Ph.D. student Navin Sridhar (→ Stanford) **2020 – 2024**
Thesis: *Plasmoid Chain Comptonization in Black Hole Coronae*
Advisor of Ph.D. student Aaron Tran (→ U. Wisconsin) **2019 – 2023**
Thesis Project: *Electron Kinetic Physics in Galaxy Clusters and the Heliosphere*
Advisor of undergraduate student W. Groger (→ Princeton) **2022 – 2025**
Senior Thesis: *Magnetic Dissipation in Relativistic Jets*
Advisor of undergraduate student S. Gupta (→ Stanford) **2022 – 2025**
Senior Thesis: *Selected Topics in Relativistic Reconnection*
Advisor of undergraduate student E. Simon (→ U. Chicago) **2019 – 2021**
Senior Thesis: *UHECR acceleration in Relativistic Plasma Turbulence*
Advisor of Bridge to the Ph.D. scholar Rafael Colon (→ Cornell U.) **2017 – 2019**
Project: *Explosive Magnetic Reconnection and Crab Nebula Gamma-Ray Flares*

Member of the Ph.D. examination committee of:

Marguerite Epstein-Martin (2026; Ph.D. advisor: Zoltan Haiman, Columbia)
 Shifra Mandel (2026; Ph.D. advisor: Charles Hailey, Columbia)
 Hari Choudhury (2026; Ph.D. advisor: Carlos Paz-Soldan, Columbia)
 Jooyun Woo (2025; Ph.D. advisor: Reshmi Mukherjee, Columbia)
 Mario Imbrogno (2025; Ph.D. advisor: Sergio Servidio, Calabria, Italy)
 Vittoria Berta (2025; Ph.D. advisor: Andrea Mignone, Torino, Italy)
 Todd Elder (2023; Ph.D. advisor: Allen Boozer, Columbia)
 Matthew Abruzzo (2023; Ph.D. advisor: Greg Bryan, Columbia)
 Dhruv Desai (2023; Ph.D. advisor: Brian Metzger, Columbia)
 Ashley Bransgrove (2023; Ph.D. advisor: Andrei Beloborodov, Columbia)
 Rui Hu (2020; Ph.D. advisor: Andrei Beloborodov, Columbia)
 Andrea Derdzinski (2019; Ph.D. advisor: Zoltan Haiman, Columbia)
 Xinyu Li (2019; Ph.D. advisor: Andrei Beloborodov, Columbia)
 Fabio Bacchini (2018; Ph.D. advisor: Giovanni Lapenta, Leuven, Belgium)
 Ben Margalit (2018; Ph.D. advisor: Brian Metzger, Columbia)
 Ricardo Fernandez (2018; Ph.D. advisor: Greg Bryan, Columbia)
 Bart Ripperda (2018; Ph.D. advisor: Rony Keppens, Leuven, Belgium)
 Alex Chen (2017; Ph.D. advisor: Andrei Beloborodov, Columbia)
 Anna Grassi (2017; Ph.D. advisor: Caterina Riconda, Univ. Pierre et Marie Curie, Paris)
 Thomas Berlok (2017; Ph.D. advisor: Martin Pessah, NBI Copenhagen, Denmark)
 Andrey Vlasov (2017; Ph.D. advisor: Brian Metzger, Columbia)

Mentoring: Postdocs	Mentor of Software FRF Hayk Hakobyan (CCA)	09/2025 – present
	Mentor of FRF Alisa Galishnikova (CCA)	09/2024 – present
	Postdoctoral sponsor of Vittoria Berta	11/2026 – present
	Postdoctoral sponsor of Jeremiah Lubke	09/2026 – present
	Postdoctoral sponsor of Andrew Sullivan	09/2026 – present
	Postdoctoral sponsor of Xiaochen Sun	09/2025 – present
	Postdoctoral sponsor of Luca Orusa	09/2025 – present
	Postdoctoral sponsor of Taiki Jikei	09/2025 – present
	Postdoctoral sponsor of Sebastiaan Selvi (→ Stanford)	09/2024 – 08/2026
	Postdoctoral sponsor of Philipp Kempfski (→ IST Lisbon, Portugal)	09/2025 – 06/2026
	Postdoctoral sponsor of Hayk Hakobyan (→ CCA)	09/2023 – 09/2025
	Postdoctoral sponsor of Jens Mahlmann (→ Dartmouth)	09/2023 – 01/2025
	Postdoctoral sponsor of Jordy Davelaar (→ Princeton)	09/2020 – 04/2023
	Postdoctoral sponsor of Joonas Nättilä (→ Helsinki, Finland)	01/2020 – 01/2022
	Postdoctoral sponsor of Daniel Groselj (→ Leuven, Belgium)	10/2019 – 09/2023
	Postdoctoral sponsor of Emanuele Sobacchi (→ GSSI, Italy)	11/2019 – 10/2022

Teaching and Summer Schools	<i>2900: Frontiers of Astrophysics</i> (Fall 2025)	
	<i>2001: Introduction to Astrophysics I</i> (Fall 2022)	
	<i>3273: High-Energy Astrophysics</i> (Spring 2018, Spring 2022, Fall 2023)	
	<i>4242: Order of Magnitude Astrophysics</i> , developed from scratch (Fall 2018, Spring 2021)	
	<i>1404: Stars, Galaxies and Cosmology</i> (Spring 2019, Fall 2020)	
	<i>8003: Astrophysical Fluid Dynamics</i> (Fall 2017, Fall 2019, Spring 2025, Fall 2026)	
	<i>9002: Graduate Student Seminar: Astro Instabilities</i> (Spring 2017)	
	<i>2026 NSF/GPAP Summer School in Plasma Physics for Astrophysicists</i> , June 2026	
	Science-on-Hudson lecture for the general public, Nevis Labs (NY), November 2025	
	SCEECs school, University of Washington at St Louis, St Louis (MO), June 2024	
	Les Houches Summer School on <i>Plasmas in Extreme Environments</i> , Les Houches, France,	

	May 2023	
	Summer school <i>Foundations of Cosmic Ray Astrophysics</i> , Varenna, Italy, June 2022	
	CCA summer school <i>Multiscale Modeling of Astrophysical and Space Plasmas</i> , CCA, New York (NY), July 2019	
Professional Societies and Service	Director of Graduate Studies in the Astronomy Department at Columbia, 2022 — present	
	Moderator/Leader of the Plasma Astrophysics group at CCA, 2023 — present	
	Member of the Computational Training Subcommittee of the Shared Research Computing Policy Advisory Committee (SRCPAC) at Columbia, 2018 – present	
	Member of the Operating Committee of the Columbia computing clusters, 2016 – present	
	Organizer of the Numerical Series for Fluids and Plasmas at CCA, 2023 — 2025	
	Co-organizer of the 2023 Les Houches Summer School	
	Co-organizer of the Summer 2022 Workshop <i>Plasmas in Strong Gravity</i> , Aspen Center for Physics, Aspen (CO), July 2022	
	Member of the ISSI research group on <i>Energy Partition across Collisionless Shocks</i> , 2022 — 2024	
	Co-organizer of the APS-DPP mini-conference on particle energization in magnetic reconnection, October 2022	
	Member of the STEM-wide group on Diversity, Equity, and Inclusion, 2020 – 2024	
	Member of the Astronomy Department Life Committee, 2017 – 2024	
	Chair (2017 – 2018) and member (2020 – 2021) of the Colloquium Committee at Columbia	
	Member of the Graduate Student Admission Committee at Columbia, 2016 – 2018	
Awards and Honors	2025 Presidential Early Career Award for Scientists and Engineers (PECASE)	2025
	2023 Department of Energy Early Career Award	2022
	2020 Cottrell Scholar Award	2020
	2019 Alfred P. Sloan Research Fellowship in Physics	2019
	Scientific Habilitation for Assoc. Professorship in Italian Universities	2014 – present
	3-year Einstein Fellowship + 2-year Harvard-ITC Fellowship	2012 – 2016
Selected Recent Invited Talks and Colloquia	Invited talk at the NORDITA workshop on <i>Synergies between astrophysical, space, laboratory, and fusion plasma physics</i> , Stockholm, Sweden, May 2026	
	Invited talk at the sixth workshop on <i>Relativistic Plasma Astrophysics</i> , Purdue Univ., West Lafayette (IN), USA, May 2026	
	Invited talk at the PCTS Cosmic Ray Research workshop, Princeton (NJ), March 2026	
	Invited talk at the iPIC3D Conference, Leuven, Belgium, February 2026	
	Colloquium at Yale University, New Haven (CT), January 2026	
	Colloquium at the APAM department, Columbia University (NY), December 2025	
	Invited tutorial talk at the 67th APS DPP Annual Meeting, Long Beach (CA), November 2025	
	Invited talk at the CDHY PeVatron Workshop, Nevis Labs (NY), October 2025	
	Invited talk at the conference <i>Frontiers of Relativistic Plasma Physics in Astrophysics and Laboratory Experiments</i> , Santa Barbara, CA, August 2025	
	Colloquium at George Washington University (DC), February 2025	
	Colloquium at the APAM department, Columbia University (NY), February 2025	
	Joint Astronomy Colloquium, Munich, Germany, February 2025	

Invited talk at the workshop *Particle Acceleration and Transport: from the Sun to Extra-galactic Sources*, Calabria, Italy, February 2025

Invited talk at the *Workshop on GRBs and Central Engine Powered Transients*, Playa del Carmen, Mexico, December 2024

Invited talk at the meeting of the SCEECS collaboration, Madison (WI), November 2024

Colloquium at the IAS, Princeton University (NJ), October 2024

Invited talk at the workshop *High-Energy Plasma Phenomena in Astrophysics*, Munich, Germany, September 2024

Invited talk at *Galaxy clusters and radio relics II*, Cambridge (MA), September 2024

Invited talk at *A Conference Honoring Ramesh Narayan*, Cambridge (MA), June 2024

Invited talk at the fifth workshop on *Relativistic Plasma Astrophysics*, Purdue Univ., West Lafayette (IN), USA, May 2024

Invited seminar at CITA, Toronto, Canada, March 2024

Colloquium at Harvard University (MA), February 2024

Colloquium at Stanford University (CA), January 2024

Invited talk at the workshop *CDY Black Hole Flare*, CCA, New York (NY), December 2023

Invited plenary talk at the workshop *Modeling Plasmas around Black Holes*, Leiden, Netherlands, September 2023

Invited talk at the workshop *Astrophysics of Fast Radio Bursts II*, CCA, New York (NY), September 2023

Colloquium at UC Berkeley (CA), August 2023

Invited talk at the *First Torino Conference on Fundamental Plasma Physics*, Torino, Italy, June 2023

Invited talk at the *Workshop on Kinetic Models of Relativistic Plasmas*, Dublin, Ireland, March 2023

Astroparticle Seminar at the Niels Bohr Institute, Copenhagen, Denmark, March 2023

Invited talk at the PCTS workshop *Improving Black Hole Accretion Models with Plasma Theory*, Princeton (NJ), February 2023

Invited Topical Plenary talk at the AAPPS-DPP2022 e-conference, October 2022

Lorenzo Sironi – Publications

- Chow, A., Sironi, L., Ripperda, B., et al. 2026, MNRAS, 552, 1, stag1631.
- Qu, Y., Nättilä, J., & Sironi, L. 2026, arXiv:2609.30494.
- Mancini, N., Comisso, L., & Sironi, L. 2026, arXiv:2609.21118.
- Mahlmann, J. F., Philippov, A. A., Soudais, A., et al. 2026, arXiv:2609.17661.
- Granier, C., Bacchini, F., Grošelj, D., et al. 2026, ApJ, 1009, 1, 56.
- Dhruv, V., Sironi, L., Davelaar, J., et al. 2026, ApJ, 1008, 2, 210.
- Sun, X., Comisso, L., Sironi, L., et al. 2026, arXiv:2608.10748.
- Jikei, T., Groselj, D., & Sironi, L. 2026, arXiv:2607.05778.
- Sridhar, N., Sobacchi, E., Sironi, L., et al. 2026, Phys. Rev. Lett., 137, 4, 045102.
- Orusa, L. & Sironi, L. 2026, Phys. Rev. Lett., 137, 2, 025201.
- Hu, Y., Comisso, L., Sironi, L., et al. 2026, ApJ, 1005, 2, 197.
- Testagrossa, F., Fiorillo, D. F. G., Comisso, L., et al. 2026, ApJ, 1004, 1, 4.
- Wu, Z.-F., Guevara-Montoya, S., Beniamini, P., et al. 2026, ApJ, 1003, 2, 242.
- Bowyer, I., Giannios, D., & Sironi, L. 2026, ApJ, 1002, 2, 181.
- Karavola, D., Petropoulou, M., Fiorillo, D. F. G., et al. 2026, A&A, 709, A94.
- Orusa, L., Caprioli, D., Sironi, L., et al. 2026, ApJ, 1001, 2, 158.
- Petropoulou, M., Karavola, D., & Sironi, L. 2026, ApJL, 1000, 1, L28.
- Mahlmann, J. F., Eskildsen, L., Vanthieghem, A., et al. 2026, ApJL, 999, 1, L15.
- Jikei, T., Grošelj, D., & Sironi, L. 2026, ApJ, 998, 1, 149.
- Ripperda, B., Grehan, M. P., Moran, A., et al. 2026, arXiv:2601.02460.
- Hakobyan, H., Levinson, A., Sironi, L., et al. 2025, ApJL, 995, 2, L73.
- Golant, R., Comisso, L., Kempster, P., et al. 2025, arXiv:2511.04663.
- Karavola, D., Petropoulou, M., Fiorillo, D. F. G., et al. 2025, JCAP, 2025, 11, E01.
- Cortés, J. & Sironi, L. 2025, MNRAS, 542, 2, 917.
- Sullivan, A. G., Cortés, J., & Sironi, L. 2025, ApJ, 991, 1, 98.
- Sobacchi, E., Lyubarsky, Y., Sironi, L., et al. 2025, A&A, 701, A124.
- Fiorillo, D. F. G., Comisso, L., Peretti, E., et al. 2025, ApJ, 989, 2, 215.
- Sironi, L., Uzdensky, D. A., & Giannios, D. 2025, ARA&A, 63, 1, 127.
- Selvi, S., Porth, O., Ripperda, B., et al. 2025, ApJL, 988, 1, L33.
- Golant, R., Vanthieghem, A., Grošelj, D., et al. 2025, ApJ, 986, 2, 211.
- Ha, T., Nättilä, J., Davelaar, J., et al. 2025, ApJL, 985, 2, L31.
- Groger, W., Hakobyan, H., & Sironi, L. 2025, ApJ, 984, 1, 28.
- Zou, M., Hakobyan, H., Mbarek, R., et al. 2025, Phys. Rev. D, 111, 8, 083032.
- Karavola, D., Petropoulou, M., Fiorillo, D. F. G., et al. 2025, JCAP, 2025, 4, 075.

Gupta, S., Sridhar, N., & Sironi, L. 2025, MNRAS, 538, 1, 49.

Sridhar, N., Ripperda, B., Sironi, L., et al. 2025, ApJ, 979, 2, 199.

Moran, A., Sironi, L., Levis, A., et al. 2025, ApJL, 978, 2, L45.

Stathopoulos, S. I., Petropoulou, M., Sironi, L., et al. 2024, JCAP, 2024, 12, 009.

Sobacchi, E., Iwamoto, M., Sironi, L., et al. 2024, Physical Review Research, 6, 4, 043213.

Cortés, J. & Sironi, L. 2024, MNRAS, 534, 3, 2551.

Fiorillo, D. F. G., Comisso, L., Peretti, E., et al. 2024, ApJ, 974, 1, 75.

Bohdan, A., Tran, A., Sironi, L., et al. 2024, ApJ, 974, 1, 37.

Sobacchi, E., Iwamoto, M., Sironi, L., et al. 2024, A&A, 690, A332.

Selvi, S., Porth, O., Ripperda, B., et al. 2024, ApJL, 968, 1, L10.

Sironi, L. & Tran, A. 2024, ApJ, 968, 2, 102.

Tran, A. & Sironi, L. 2024, ApJ, 965, 1, 37.

Grošelj, D., Sironi, L., & Spitkovsky, A. 2024, ApJL, 963, 2, L44.

Grošelj, D., Hakobyan, H., Beloborodov, A. M., et al. 2024, Phys. Rev. Lett., 132, 8, 085202.

Gupta, S., Sridhar, N., & Sironi, L. 2024, MNRAS, 527, 3, 6065.

Fiorillo, D. F. G., Petropoulou, M., Comisso, L., et al. 2024, ApJL, 961, 1, L14.

Davelaar, J., Ripperda, B., Sironi, L., et al. 2023, ApJL, 959, 1, L3.

Zhang, H., Sironi, L., Giannios, D., et al. 2023, ApJL, 956, 2, L36.

Chow, A., Rowan, M. E., Sironi, L., et al. 2023, MNRAS, 524, 1, 90.

Sironi, L., Comisso, L., & Golant, R. 2023, Phys. Rev. Lett., 131, 5, 055201.

Chow, A., Davelaar, J., Rowan, M. E., et al. 2023, ApJL, 951, 2, L23.

Iwamoto, M., Sobacchi, E., & Sironi, L. 2023, MNRAS, 522, 2, 2133.

Selvi, S., Porth, O., Ripperda, B., et al. 2023, ApJ, 950, 2, 169.

Raymond, J. C., Ghavamian, P., Bohdan, A., et al. 2023, ApJ, 949, 2, 50.

Tran, A., Sironi, L., Ley, F., et al. 2023, ApJ, 948, 2, 130.

Mahlmann, J. F., Philippov, A. A., Mewes, V., et al. 2023, ApJL, 947, 2, L34.

Ley, F., Zweibel, E. G., Riquelme, M., et al. 2023, ApJ, 947, 2, 89.

Sobacchi, E., Lyubarsky, Y., Beloborodov, A. M., et al. 2023, ApJL, 943, 2, L21.

Sridhar, N., Sironi, L., & Beloborodov, A. M. 2023, MNRAS, 518, 1, 1301.

Comisso, L. & Sironi, L. 2022, ApJL, 936, 2, L27.

Bresci, V., Lemoine, M., Gremillet, L., et al. 2022, Phys. Rev. D, 106, 2, 023028.

Cortés, J. & Sironi, L. 2022, ApJ, 933, 2, 140.

Grošelj, D., Sironi, L., & Beloborodov, A. M. 2022, ApJ, 933, 1, 74.

Sironi, L. 2022, Phys. Rev. Lett., 128, 14, 145102.

Mbarek, R., Haggerty, C., Sironi, L., et al. 2022, Phys. Rev. Lett., 128, 14, 145101.

Sobacchi, E., Lyubarsky, Y., Beloborodov, A. M., et al. 2022, MNRAS, 511, 4, 4766.

Hajela, A., Margutti, R., Bright, J. S., et al. 2022, ApJL, 927, 1, L17.

Metzger, B. D., Sridhar, N., Margalit, B., et al. 2022, *ApJ*, 925, 2, 135.

Adams, C. B., Batshoun, J., Benbow, W., et al. 2022, *ApJ*, 924, 2, 95.

Riquelme, M., Osorio, A., Verscharen, D., et al. 2022, *ApJ*, 924, 2, 52.

Mooley, K. P., Margalit, B., Law, C. J., et al. 2022, *ApJ*, 924, 1, 16.

Comisso, L. & Sironi, L. 2021, *Phys. Rev. Lett.*, 127, 25, 255102.

Zhang, H., Sironi, L., & Giannios, D. 2021, *ApJ*, 922, 2, 261.

Sridhar, N., Sironi, L., & Beloborodov, A. M. 2021, *MNRAS*, 507, 4, 5625.

Sobacchi, E., Sironi, L., & Beloborodov, A. M. 2021, *MNRAS*, 506, 1, 38.

Sridhar, N., Metzger, B. D., Beniamini, P., et al. 2021, *ApJ*, 917, 1, 13.

Sironi, L., Plotnikov, I., Nättilä, J., et al. 2021, *Phys. Rev. Lett.*, 127, 3, 035101.

Li, X., Beloborodov, A. M., & Sironi, L. 2021, *ApJ*, 915, 2, 101.

Sobacchi, E., Nättilä, J., & Sironi, L. 2021, *MNRAS*, 503, 1, 688.

Hakobyan, H., Petropoulou, M., Spitkovsky, A., et al. 2021, *ApJ*, 912, 1, 48.

Sridhar, N., Zrake, J., Metzger, B. D., et al. 2021, *MNRAS*, 501, 3, 3184.

Bodo, G., Tavecchio, F., & Sironi, L. 2021, *MNRAS*, 501, 2, 2836.

Sironi, L., Rowan, M. E., & Narayan, R. 2021, *ApJL*, 907, 2, L44.

Sobacchi, E., Lyubarsky, Y., Beloborodov, A. M., et al. 2021, *MNRAS*, 500, 1, 272.

Babul, A.-N. & Sironi, L. 2020, *MNRAS*, 499, 2, 2884.

Tavecchio, F., Landoni, M., Sironi, L., et al. 2020, *MNRAS*, 498, 1, 599.

Tran, A. & Sironi, L. 2020, *ApJL*, 900, 2, L36.

Hosking, D. N. & Sironi, L. 2020, *ApJL*, 900, 2, L23.

Mehta, R., Barkov, M., Sironi, L., et al. 2020, *Journal of Plasma Physics*, 86, 4, 905860407.

Sironi, L. & Beloborodov, A. M. 2020, *ApJ*, 899, 1, 52.

Margalit, B., Metzger, B. D., & Sironi, L. 2020, *MNRAS*, 494, 4, 4627.

Comisso, L., Sobacchi, E., & Sironi, L. 2020, *ApJL*, 895, 2, L40.

Christie, I. M., Petropoulou, M., Sironi, L., et al. 2020, *MNRAS*, 492, 1, 549.

Comisso, L. & Sironi, L. 2019, *ApJ*, 886, 2, 122.

Plotnikov, I. & Sironi, L. 2019, *MNRAS*, 490, 1, 156.

Hajela, A., Margutti, R., Alexander, K. D., et al. 2019, *ApJL*, 886, 1, L17.

Lyutikov, M., Temim, T., Komissarov, S., et al. 2019, *MNRAS*, 489, 2, 2403.

Ball, D., Sironi, L., & Özel, F. 2019, *ApJ*, 884, 1, 57.

Fong, W., Blanchard, P. K., Alexander, K. D., et al. 2019, *ApJL*, 883, 1, L1.

Ley, F., Riquelme, M., Sironi, L., et al. 2019, *ApJ*, 880, 2, 100.

Petropoulou, M., Sironi, L., Spitkovsky, A., et al. 2019, *ApJ*, 880, 1, 37.

Metzger, B. D., Margalit, B., & Sironi, L. 2019, *MNRAS*, 485, 3, 4091.

Plotnikov, I. & Sironi, L. 2019, *MNRAS*, 485, 3, 3816.

Ripperda, B., Porth, O., Sironi, L., et al. 2019, *MNRAS*, 485, 1, 299.

Rowan, M. E., Sironi, L., & Narayan, R. 2019, *ApJ*, 873, 1, 2.

Bacchini, F., Ripperda, B., Porth, O., et al. 2019, *ApJS*, 240, 2, 40.

Christie, I. M., Petropoulou, M., Sironi, L., et al. 2019, *MNRAS*, 482, 1, 65.

Comisso, L. & Sironi, L. 2018, *Phys. Rev. Lett.*, 121, 25, 255101.

Petropoulou, M. & Sironi, L. 2018, *MNRAS*, 481, 4, 5687.

Tavecchio, F., Landoni, M., Sironi, L., et al. 2018, *MNRAS*, 480, 3, 2872.

Law, C. J., Gaensler, B. M., Metzger, B. D., et al. 2018, *ApJL*, 866, 2, L22.

Johnson, M. D., Narayan, R., Psaltis, D., et al. 2018, *ApJ*, 865, 2, 104.

Chael, A., Rowan, M., Narayan, R., et al. 2018, *MNRAS*, 478, 4, 5209.

Alexander, K. D., Margutti, R., Blanchard, P. K., et al. 2018, *ApJL*, 863, 2, L18.

Bacchini, F., Ripperda, B., Chen, A. Y., et al. 2018, *ApJS*, 237, 1, 6.

Ball, D., Sironi, L., & Özel, F. 2018, *ApJ*, 862, 1, 80.

Guo, X., Sironi, L., & Narayan, R. 2018, *ApJ*, 858, 2, 95.

Petropoulou, M., Christie, I. M., Sironi, L., et al. 2018, *MNRAS*, 475, 3, 3797.

Lyutikov, M., Komissarov, S., Sironi, L., et al. 2018, *Journal of Plasma Physics*, 84, 2, 635840201.

Ripperda, B., Bacchini, F., Teunissen, J., et al. 2018, *ApJS*, 235, 1, 21.

Margutti, R., Alexander, K. D., Xie, X., et al. 2018, *ApJL*, 856, 1, L18.

Ball, D., Özel, F., Psaltis, D., et al. 2018, *ApJ*, 853, 2, 184.

Lyutikov, M., Sironi, L., Komissarov, S. S., et al. 2017, *Journal of Plasma Physics*, 83, 6, 635830602.

Lyutikov, M., Sironi, L., Komissarov, S. S., et al. 2017, *Journal of Plasma Physics*, 83, 6, 635830601.

Guo, X., Sironi, L., & Narayan, R. 2017, *ApJ*, 851, 2, 134.

Rowan, M. E., Sironi, L., & Narayan, R. 2017, *ApJ*, 850, 1, 29.

Petropoulou, M., Coenders, S., Vasilopoulos, G., et al. 2017, *MNRAS*, 470, 2, 1881.

Blandford, R., Yuan, Y., Hoshino, M., et al. 2017, *Space Sci. Rev.*, 207, 1-4, 291.

Bret, A., Pe’Er, A., Sironi, L., et al. 2017, *Journal of Plasma Physics*, 83, 2, 715830201.

Petropoulou, M., Giannios, D., & Sironi, L. 2016, *MNRAS*, 462, 3, 3325.

Sironi, L., Giannios, D., & Petropoulou, M. 2016, *MNRAS*, 462, 1, 48.

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