

Elenco delle pubblicazioni

'Corresponding author' marks papers as lead or full co-lead. Citations from NASA ADS, including link to entry.

- 1) **M. Gatti**, N. Jeffrey, L. Whiteway, ..., P. Wiseman (DES collaboration) "Detection of the significant impact of source clustering on higher order statistics with DES Year 3 weak gravitational lensing data" , MNRAS Letters L115-L121 , (2024) **corresponding author**, 1st out of 101, [8 citations](#)
- 2) **M. Gatti**, B. Jain, C. Chang, ..., T.N. Varga (DES collaboration) "Dark Energy Survey Year 3 results: cosmology with moments of weak lensing mass maps" Phys. Rev.D 105, 023520 (2022), **corresponding author**, 1st out of 110, [40 citations](#)
- 3) T.M.C. Abbott, M. Aguena, A. Alarcon, ..., J. Zuntz(DES Collaboration), "Dark Energy Survey Year 3 results: Cosmological Constraints from Galaxy Clustering and Weak Lensing", Phys. Rev. D 98, 043526 (2022) (alphabetical order paper, p), [651 citations](#)
- 4) **M. Gatti**, S. Pandey, E. Baxter, ..., Z. Xu (DES and ACT collaborations) "Cross-correlation of DES Year 3 lensing and ACT/Planck Sunyaev Zel'dovich Effect measurements I: measurements, systematics tests, and feedback model constraints", Phys. Rev. D 105, 123525 (2022), **corresponding author**, 1st out of 119 [25 citations](#)
- 5) **M. Gatti**, G. Giannini, G. Bernstein, ..., R.D. Wilkinson (DES collaboration) "Dark Energy Survey Year 3 Results: Clustering Redshifts – Calibration of the Weak Lensing Source Redshift Distributions with redMaGiC and BOSS/eBOSS", MNRAS, 510 1223-1247, (2021), **corresponding author**, 1st out of 99, [52 citations](#)
- 6) N. Jeffrey & **M. Gatti**, C. Chang, ..., J.D. Weller (DES collaboration) " Dark Energy Survey Year 3 results: curved-sky weak lensing mass map reconstruction" MNRAS, 505, 4626-4645 (2021) **corresponding author**, 2nd out of 131 [52 citations](#)
- 7) **M Gatti**, E. Sheldon, A. Amon, ..., R.D. Wilkinson (DES collaboration) " Dark Energy Survey Year 3 Results: Weak Lensing Shape Catalogue" , MNRAS 504 4312-4336 (2021), **corresponding author**, 1st out of 104 [108 citations](#)
- 8) **M Gatti**, C. Chang, B. Jain, ..., J. Zuntz (DES collaboration) " Dark Energy Survey Year 3 Results: cosmology with moments of weak lensing mass maps – validation on simulations" , MNRAS 4988 4060-4087 (2020), **corresponding author**, 1st out of 72 [44 citations](#)
- 9) T.M.C. Abbott, F.B. Abdalla, A. Alarcon, ..., J. Zuntz (DES Collaboration), "Dark Energy Survey Year 1 results: Cosmological Constraints from Galaxy Clustering and Weak Lensing", Phys. Rev. D 98, 043526 (2018) (alphabetical order paper), [1016 citations](#)
- 10) **M. Gatti**, P. Vielzeuf, C. Davis, ..., R.C. Wolf (DES collaboration) "Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts - Methods and Systematics Characterization", MNRAS 477 1664-1682 (2018) , **corresponding author**, 1st out of 107 , [71 citations](#)
- 11) **M. Gatti**, F. Shankar, V. Bouillot, ..., F.Fiore "Constraining AGN triggering mechanisms through the clustering analysis of active black holes", MNRAS 456, 1073-1092 (2016) **corresponding author**, 1st out of 7, [20 citations](#)
- 12) **M. Gatti**, A. Lamastra, N. Menci, A. Bongiorno, F.Fiore "Physical properties of AGN host galaxies as a probe of supermassive black hole feeding mechanisms", A&A 576, A32 (2015) **corresponding author**, 1st out of 5, [13 citations](#)

Tesi di dottorato

Title: “Weak lensing in DES Y3: redshift distributions, shape catalogue, and mass mapping”

- [Marco Gatti](#)([Barcelona, IFAE](#))

Sep, 2020, 273 pages

Supervisors:

- [Ramon Miquel](#)([Barcelona, IFAE](#))
- [Chihway Chang](#)([Chicago U., KICP](#))

Thesis: PhD

- Barcelona, IFAE

(defense: Sep, 2020)

- Published: 2020

DOI:

- [10.2172/1771180](#)

Report number:

- FERMILAB-THESIS-2020-25

Experiments:

- [DES](#)

View in:

- [OSTI Information Bridge Server](#)

List of Publications

Refereed publications

- 12) Trefoloni et al. 2023, A&A 677, 111T, "*The most luminous blue quasars at $3.0 < z < 3.3$ III. Enhanced iron and faint [O iii] emission in X-ray weak quasars*", (arXiv:2305.07699)
- 11) Sengupta et al. 2023, A&A 676, 103S, "*Compton-thick AGN in the NuSTAR Era X: Analysing seven local CT-AGN candidates*", (arXiv:2305.07705)
- 10) Feltre et al. 2022, A&A, 675, 74F, "*Optical and mid-infrared line emission in nearby Seyfert galaxies*", (arXiv:2301.02252)
- 9) Casasola et al. 2022, A&A, 668, 130, 38, "*The resolved scaling relations in DustPedia: Zooming in on the local Universe*", (arXiv:2210.15993)
- 8) Salvestrini et al. 2022, A&A 663 A28, "*The molecular gas properties in local Seyfert 2 galaxies*", (arXiv:2203.15825)
- 7) Marchesi et al. 2022, ApJ, 935, 2, 114 "*Compton-Thick AGN in the NuSTAR era VIII: A joint NuSTAR-XMM-Newton monitoring of the changing-look Compton-thick AGN NGC 1358*", (arXiv:2207.06734)
- 6) Esposito et al. 2022, MNRAS, 512, 686, "*AGN impact on the molecular gas in galactic centers as probed by CO lines*", (arXiv:2202.00697)
- 5) Lusso et al. 2021, A&A 653 A158, "*The most luminous blue quasars at $3.0 < z < 3.3$. II. C IV/X-ray emission and accretion disc physics*", (arXiv: 2107.02806)
- 4) Salvestrini et al. 2020, A&A 641 A151, "*The molecular gas in the central region of NGC 7213*", (arXiv:2007.02990)
- 3) Lusso et al. 2020, A&A 642 A150, "*Quasars as standard candles III. Validation of a new sample for cosmological studies*", (arXiv: 2008.08586)
- 2) Nardini et al. 2019, A&A 632 A109, "*The most luminous blue quasars at $3.0 < z < 3.3$. I. A tale of two X-ray populations*", (arXiv:1910.04604)
- 1) Salvestrini et al. 2019, A&A 631 A120, "*Quasars as standard candles II: The non linear relation between UV and X-ray emission at high redshifts*", (arXiv:1909.12309)

PhD thesis

- 1) "*The impact of AGN activity on the host-galaxy ISM*", 2021, (DOI: 10.48676/unibo/amsdottorato/9830)

- 1) **Ursini, F.**; Bassani, L.; Malizia, A.; Bazzano, A.; Bird, A. J.; Stephen, J. B.; Ubertini, P. *The coronal temperature of NGC 4388 and NGC 2110 measured with INTEGRAL*. 2019, *Astronomy & Astrophysics*, Volume 629, id.A54
<https://doi.org/10.1051/0004-6361/201936273>
- 2) Molina, M.; Malizia, A.; Bassani, L.; **Ursini, F.**; Bazzano, A.; Ubertini, P. *Swift/XRT-NuSTAR spectra of type 1 AGN: confirming INTEGRAL results on the high-energy cut-off*. 2019, *Monthly Notices of the Royal Astronomical Society*, Volume 484, Issue 2, p.2735-2746.
<https://doi.org/10.1093/mnras/stz156>
- 3) **Ursini, F.**; Bassani, L.; Panessa, F.; Pian, E.; Bruni, G.; Bazzano, A.; Masetti, N.; Sokolovsky, K.; Ubertini, P. *An XMM-Newton look at the strongly variable radio-weak BL Lac Fermi J1544-0639*. 2019, *Astronomy & Astrophysics*, Volume 622, id.A116, 11 pp.
<https://doi.org/10.1051/0004-6361/201834662>
- 4) **Ursini, F.**; Bassani, L.; Panessa, F.; Bird, A. J.; Bruni, G.; Fiocchi, M.; Malizia, A.; Saripalli, L.; Ubertini, P. *Hard X-ray-selected giant radio galaxies - I. The X-ray properties and radio connection*. 2018, *Monthly Notices of the Royal Astronomical Society*, Volume 481, Issue 3, p.4250-4260.
<https://doi.org/10.1093/mnras/sty2547>
- 5) Middei, R.; Bianchi, S.; Cappi, M.; Petrucci, P. -O.; **Ursini, F.**; Arav, N.; Behar, E.; Branduardi-Raymont, G.; Costantini, E.; De Marco, B.; Di Gesu, L.; Ebrero, J.; Kaastra, J.; Kaspi, S.; Kriss, G. A.; Mao, J.; Mehdipour, M.; Paltani, S.; Peretz, U.; Ponti, G. *Multi-wavelength campaign on NCG 7469. IV. The broad-band X-ray spectrum*. 2018, *Astronomy & Astrophysics*, Volume 615, id.A163, 10 pp.
<https://doi.org/10.1051/0004-6361/201832726>
- 6) **Ursini, F.**; Bassani, L.; Panessa, F.; Bazzano, A.; Bird, A. J.; Malizia, A.; Ubertini, P. *Where are Compton-thick radio galaxies? A hard X-ray view of three candidates*. 2018, *Monthly Notices of the Royal Astronomical Society*, Volume 474, Issue 4, p.5684-5693.
<https://doi.org/10.1093/mnras/stx3159>
- 7) Petrucci, P. -O.; **Ursini, F.**; De Rosa, A.; Bianchi, S.; Cappi, M.; Matt, G.; Dadina, M.; Malzac, J. *Testing warm Comptonization models for the origin of the soft X-ray excess in AGNs*. 2018, *Astronomy & Astrophysics*, Volume 611, id.A59, 19 pp.
<https://doi.org/10.1051/0004-6361/201731580>
- 8) **Ursini, F.**; Petrucci, P. -O.; Matt, G.; Bianchi, S.; Cappi, M.; De Marco, B.; De Rosa, A.; Malzac, J.; Marinucci, A.; Ponti, G.; Tortosa, A. *High-energy monitoring of NGC 4593 with XMM-Newton and NuSTAR. X-ray spectral analysis*. 2016, *Monthly Notices of the Royal Astronomical Society*, Volume 463, Issue 1, p.382-392.
<https://doi.org/10.1093/mnras/stw2022>

- 9) **Ursini, F.**; Marinucci, A.; Matt, G.; Bianchi, S.; Tortosa, A.; Stern, D.; Arévalo, P.; Ballantyne, D. R.; Bauer, F. E.; Fabian, A. C.; Harrison, F. A.; Lohfink, A. M.; Reynolds, C. S.; Walton, D. J. *The NuSTAR X-ray spectrum of the low-luminosity active galactic nucleus in NGC 7213*. 2015, Monthly Notices of the Royal Astronomical Society, Volume 452, Issue 3, p.3266-3272.
<https://doi.org/10.1093/mnras/stv1527>

- 10) **Ursini, F.**; Boissay, R.; Petrucci, P. -O.; Matt, G.; Cappi, M.; Bianchi, S.; Kaastra, J.; Harrison, F.; Walton, D. J.; di Gesu, L.; Costantini, E.; De Marco, B.; Kriss, G. A.; Mehdipour, M.; Paltani, S.; Peterson, B. M.; Ponti, G.; Steenbrugge, K. C. *Anatomy of the AGN in NGC 5548. III. The high-energy view with NuSTAR and INTEGRAL*. 2015, Astronomy & Astrophysics, Volume 577, id.A38, 9 pp.
<https://doi.org/10.1051/0004-6361/201425401>

- 11) Mehdipour, M.; Kaastra, J. S.; Kriss, G. A.; Cappi, M.; Petrucci, P. -O.; Steenbrugge, K. C.; Arav, N.; Behar, E.; Bianchi, S.; Boissay, R.; Branduardi-Raymont, G.; Costantini, E.; Ebrero, J.; Di Gesu, L.; Harrison, F. A.; Kaspi, S.; De Marco, B.; Matt, G.; Paltani, S.; Peterson, B. M.; Ponti, G.; Pozo Nuñez, F.; De Rosa, A.; **Ursini, F.**; de Vries, C. P.; Walton, D. J.; Whewell, M. *Anatomy of the AGN in NGC 5548. I. A global model for the broadband spectral energy distribution*. 2015, Astronomy & Astrophysics, Volume 575, id.A22, 18 pp.
<https://doi.org/10.1051/0004-6361/201425373>

- 12) Kaastra, J. S.; Kriss, G. A.; Cappi, M.; Mehdipour, M.; Petrucci, P. -O.; Steenbrugge, K. C.; Arav, N.; Behar, E.; Bianchi, S.; Boissay, R.; Branduardi-Raymont, G.; Chamberlain, C.; Costantini, E.; Ely, J. C.; Ebrero, J.; Di Gesu, L.; Harrison, F. A.; Kaspi, S.; Malzac, J.; De Marco, B.; Matt, G.; Nandra, K.; Paltani, S.; Person, R.; Peterson, B. M.; Pinto, C.; Ponti, G.; Nuñez, F. Pozo; De Rosa, A.; Seta, H.; **Ursini, F.**; de Vries, C. P.; Walton, D. J.; Whewell, M. *A fast and long-lived outflow from the supermassive black hole in NGC 5548*. Science, Volume 345, Issue 6192, pp. 64-68 (2014).
<https://doi.org/10.1126/science.1253787>

Ph.D. Thesis:

Ursini, F. *Constraining the high-energy emission sources in the environment of supermassive black holes* (2016)

Supervisors: P.-O. Petrucci (Université Grenoble Alpes), G. Matt (Università Roma Tre)

<https://tel.archives-ouvertes.fr/tel-01589295/>

<https://www.theses.fr/en/2016GREAY062>

Marco Gatti

Kavli Institute for Cosmological Physics, University of Chicago, Chicago, IL 60637, (USA)

9/07/2024

Current Position

KICP fellow

July 2024 - July 2027

University of Chicago, Kavli Institute for Cosmological Physics (KICP)
Chicago (USA)

Past Positions

Postdoctoral researcher

Nov. 2020 - July 2024

University of Pennsylvania (Department of Physics & Astronomy)
Philadelphia (USA)
Advisor: Prof. Gary M. Bernstein, Prof. Bhuvnesh Jain

EDUCATION

Doctor of Philosophy (PhD) in Physics

Oct. 2015 - Sept. 2020

Institut de Física d'Altes Energies (IFAE),
Universitat Autònoma de Barcelona (UAB), Barcelona (Spain)
Thesis: Weak lensing in DES Y3: redshift distributions, shape catalogue, and mass mapping
Advisor: Prof. Ramon Miquel, Prof. Chihway Chang
Final mark: Excellent & cum Laude

Master's Degree in Astronomy and Astrophysics

Oct. 2012 - July 2014

Sapienza University of Rome
Rome (Italy)
Thesis: The growth of supermassive black holes: disk instability vs interactions
Advisor: Prof. Fabrizio Fiore
Final Mark: 110 cum Laude/110. All exams marked 30 cum Laude/30

Bachelors's Degree in Physics

Oct. 2009 - July 2012

University of Genoa
Genoa (Italy)
Final Mark: 110 cum Laude/110.

CV SUMMARY

I graduated in Physics from the University of Genoa in 2012, followed by a Master's in Astronomy and Astrophysics at University La Sapienza in 2014. During my Master's, I spent a year with the Astronomy and High Energy Astrophysics group at Osservatorio Astronomico di Roma. In 2015, I joined the Observational Cosmology group at the Institut de Física d'Altes Energies, Universitat Autònoma de Barcelona, conducting doctoral research on galaxy surveys as a Severo Ochoa 'La Caixa' fellow. In 2020, I became a postdoctoral researcher at the University of Pennsylvania, obtaining a five-year fellowship. In January 2024, I won the highly competitive KICP fellowship at the University of Chicago, which I joined in summer 2024.

My research interests center around studying the Universe's large-scale structure, focusing on various scientific aspects of photometric galaxy surveys. I am keen on discovering new methods to optimize information extraction from current datasets, aiming to rigorously test the Λ CDM model and its extensions. Simultaneously, I am developing techniques to mitigate observational and astrophysical systematics. I am part of the Euclid consortium, and I am deeply involved in the Dark Energy Survey (DES), contributing to almost every DES analysis stage over the years. My work spans from pixel-level tasks to leading new cosmological data analyses. During the DES Y1 and Y3 analyses, I pioneered the clustering- z technique for inferring galaxy redshift distributions. We introduced a joint likelihood framework that combines clustering redshift and photometric methods for redshift estimation, efficiently marginalizing over systematic effects. In DES Y3, I co-led the creation of the DES Y3 weak lensing catalog (which is the largest weak lensing catalog to date) and assessed systematic effects on galaxy shape measurements and weak lensing observables. I also co-led producing and characterizing the DES Y3 weak lensing mass maps, the largest from a photometric survey. I developed an analytical pipeline for modeling the second and third moments of these maps, aiming to infer cosmological parameters. This approach led to the most precise constraints on S_8 from a weak lensing survey. Using DES Y3 weak lensing data and Compton- y maps from Planck and ACT, I measured the weak lensing-thermal Sunyaev-Zeldovich correlation at an unprecedented significance level, and I used the measurement to test various baryonic feedback mechanisms. I also discovered that weak lensing map-based higher-order statistics are significantly influenced by source galaxy clustering, a previously overlooked effect. I am now working on the first weak lensing analysis combining various non-Gaussian statistics using a robust simulation-based inference framework. For the DES Y6 analysis, I am leading the creation of one of two weak lensing catalogs, applying the Bayesian Fourier Domain method for the first time, which is expected to double the number of galaxies with respect to the DES Y3 catalog. Additionally, through my recent collaboration with data scientists from the UPenn Data-Driven Discovery Initiative, I am exploring different machine learning topics applied to cosmology.

I currently have around 110 original publications in leading peer-reviewed astronomy journals, and an h -index of 41. These include around 100 authored through collaborations and about 10 with small groups of collaborators. Of these, I am the corresponding author for 12 publications, which have collectively accumulated more than 400 citations. Additionally, I am among the first-tier authors (meaning I made major contributions) in another 18 papers. Within the DES collaboration, I have published more papers as the first author (10 in total) than any other member since the inception of DES. I have been invited to present my work at more than 25 conferences and seminars across the US and Europe. I have supervised, and continue to supervise, several undergraduate and graduate students (i.e., Master and PhD students), co-authoring multiple publications with them. I am part of the DES mentoring program, which provides extra career support to early career scientists within the collaboration. Due to my infrastructure contributions to DES, I have been awarded Builder status since 2021. I have also been appointed co-coordinator of the DES Shear Catalog Analysis Team (2019-2020), and co-coordinator of the DES Mass Mapping and Forward Modelling Team (2021-2024), and I currently co-coordinator of the Beyond 2pt Analysis Team (2024-). Since 2019, I have co-organized more than 20 dedicated sessions at 10 different DES workshops and meetings.

Since 2017, I have been serving as a referee for Monthly Notices of the Royal Astronomical Society (MNRAS), Astronomy & Astrophysics (A&A), the Astrophysical Journal (ApJ), Publi-

cations of the Astronomical Society of Japan (PASJ), and the Journal of Cosmology and Astroparticle Physics (JCAP). I am also serving as a referee for the UKRI Funding Service, the national UK funding agency. I have been engaged in various outreach activities, including conducting seminars for high school students, developing and organizing hands-on activities with students, and giving interviews to national and international newspapers. In 2023, I have been awarded the Italian habilitation to academic professorship by the Italian Ministry of Education. I have won two grants as co-PI and PI, awarding computational resources for a total of 180k GPU hours (corresponding roughly to 700k dollars).

RESEARCH ACHIEVEMENTS

- Detected for the first time the impact of source clustering effects on weak lensing non Gaussian statistics ([Gatti et al. 2023](#)).
- Developed a pipeline able to use the second and third-order moments of weak lensing mass maps to infer cosmology ([Gatti et al. 2022](#), [Gatti et al. 2020](#)). The analysis delivered the tightest cosmological constraints from a weak lensing-only analysis to date.
- Co-leading the DES Mass Mapping and Forward Modelling working group since 2020, which is delivering the most constraining weak lensing non Gaussian analyses to date.
- Produced the largest weak lensing mass maps to date ([Jeffrey & Gatti et al. 2022](#)).
- Co-lead the DES shear testing working group during the Year 3 data, which delivered the largest weak lensing shape catalogue to date.
- Devised a joint likelihood framework which provides redshift estimates combining constraints from clustering-z and photo-z methods ([Gatti et al. 2022](#)).
- Measured the cross-correlation between thermal Sunyaev-Zeldovich maps and weak galaxy lensing shears at the highest significance to date, and used to test baryonic feedback mechanisms ([Gatti et al 2022](#)).

SELECTED TALKS AND SEMINARS

Mar. 2024	“Weak lensing simulation based inference”, cosmology seminar, Yale University (invited)
Dec. 2023	“Non Gaussian weak lensing statistics in the era of precision cosmology”, cosmology seminar, Leiden University (invited)
Dec. 2023	“Non Gaussian weak lensing statistics in the era of precision cosmology”, cosmology seminar, La Sapienza, Rome (invited)
Dec. 2023	“Non Gaussian weak lensing statistics in the era of precision cosmology”, cosmology seminar, University of Genoa (invited)
Dec. 2023	“Cosmology from weak lensing simulation based inference“ at “Debating the potential of machine learning for astronomical surveys“ Center for Computational Astrophysics (CCA), New York
Sept. 2023	“Simulation-based inference with Non-Gaussian statistics of weak lensing observables & DES Y3 data ” at COSMO23, Madrid
March 2023	“Constraints from Non Gaussian weak lensing analyses”, cosmology seminar, Columbia University (invited)
Sept. 2022	“Cosmology with weak lensing”, cosmology seminar, Berkeley, (invited)
July 2022	“Constraints from Non Gaussian weak lensing analyses”, at “Intriguing discrepancies in the growth of structures over cosmic time”, Sexten, Italy (invited)

June 2022	“Constraints on AGN feedback models from lensing-tSZ cross-correlations” SZ Workshop, CCA (invited)
May 2022	“Cosmology from Weak Lensing Non-Gaussian Statistics” LMU lensing seminar , Ludwig Maximilian University (invited)
May 2022	“Cosmology from non Gaussian Map Based Statistics with DES Y3 data”, IberiCOS, Barcelona 2022
Apr. 2022	“Cosmology from non Gaussian Map Based Statistics with DES Y3 data” at “Cosmology with Weak Lensing: Beyond the Two-point Statistics”, YITP, Kyoto (invited)
Mar. 2022	“Cosmology from Weak Lensing Non-Gaussian Statistics”, cosmology seminar, LBL, Berkeley (invited)
Jan. 2022	Guest expert at the workshop “How measuring baryons can improve clustering analyses” (online) (invited)
Jan. 2022	Speaker for the Cosmopalooza 2022, “Cosmology from Non-Gaussian Map-Based Statistics with DES Y3 data” (invited),
Jan. 2022	“Cosmology from Non-Gaussian Map-Based Statistics with DES Y3 data”, 239th AAS Annual Meeting (invited),
Feb. 2021	“Clustering Redshifts in DES Y3 and the DES Y3 photo-z calibration strategy”, German Center for Cosmological Lensing (GCCL) seminar (invited)
Sept. 2020	“Curved-Sky Weak Lensing Mass Map with the Dark Energy Survey Y3 data”, cosmology seminar, CMU/UPitt (invited)
Jan. 2020	“Curved-Sky Weak Lensing Mass Map with the Dark Energy Survey Y3 data”, cosmology seminar, Duke University (invited)
Sept. 2019	“Cosmological Constraints from Moments of Weak Lensing Mass Maps” at COSMO19 , Aachen
June 2018	“Cosmology with curved-sky weak lensing mass maps”, cosmology seminar, KICP Chicago (invited)
Apr. 2018	Panelist for the photo-z discussion session, at “Statistical Challenges for Large-scale Structure in the Era of LSST”, Oxford UK (invited)
Oct. 2017	“Clustering-redshift in the DES Y1 analysis”,at Euclid Photo-z workshop, Toulouse (invited)
Apr. 2015	“Triggering AGN activity: disk instability vs. galaxy interactions”, seminar, MPE Munich (invited)
Oct. 2014	“The role of disk instabilities and galaxy interactions in triggering AGN activity”, seminar, Southampton (invited)

RESEARCH STAYS

(In addition to the time spent at the host institution)

2 months research stay at the Kavli Institute for Cosmological Physics, Chicago	2018
18 months research stay at the Osservatorio Astronomico di Roma (OAR), Rome (Italy)	2013-2015
1 week research stay at the University of Southampton (UK)	2014
6 months research stay at the Institute of Space Astrophysics and Planetology (IAPS), Rome (Italy)	2013

MEMBERSHIP AND COORDINATION IN INTERNATIONAL COLLABORATIONS, EVALUATION COMMITTEES & REFEREEING

Dark Energy Suvery (DES) collaboration - member	2015 - Present
Euclid collaboration - member	2022 - Present
NASA Open Universe collaboration - member	2024 - Present
Co-Coordinator of the Beyond 2pt Working Group	2024 - Present
Co-Coordinator of the DES Mass Mapping and Forward modelling Working Group	2021 - 2024
Co-Coordinator of the DES Shear Catalogue Tests Working Group	2019 - 2020
Mentor for the DES Mentorship program	2021 - Present
External referee for MNRAS, A&A, PASJ, JCAP,APJ	2017 - Present
Referee for the UKRI Funding Service	2024 - Present

AWARDS

co-PI 140k GPU hours at Dirac supercomputing facilities	2024 - Present
PI 40k GPU hours at Argonne Leadership Computing Facility facilities	2024 - Present
Italian professorship habilitation	2024 - 2027
KICP Postdoctoral fellowship at the University of Chicago (246000\$)	2020 - 2025
postdoctoral fellowship at the University of Pennsylvania (310000\$)	2020 - 2024
GCCL Postdoctoral fellowship at the University of Bochum, declined (220000 euros)	2021 - Present
Dark Energy Survey Builder	2015 - 2019
Severo Ochoa “La Caixa” PhD fellowship	2013
“Percorso di Eccellenza” Msc fellowship, Sapienza University (2000 euros)	2012 - 2013
“Wanted the best” Msc fellowship, Sapienza University (5000 euros)	

SUPERVISING AND MENTORING ACTIVITIES

Mentoring PhD student (Giulia Giannini), 2 papers	2020 - 2022
Mentoring PhD student (Shivam Pandey), 2 papers	2020 - 2022
Mentoring PhD student (Minsu Park), 1 paper in prep.	2022 - Present
Mentoring PhD student (Vernon Wetzell), 1 paper in prep.	2022 - Present
Mentoring PhD student (Rafael Gomes) 1 paper in prep.	2022 - Present
Mentoring PhD student (Zhou Conghao) 1 paper in prep.	2022 - Present
Mentoring undergraduate student (Jack Purple)	2023
Mentoring undergraduate student (Sanjit Kobla) 1 paper in prep.	2023 - Present
Mentoring undergraduate student (Sara Kane)	2022
Mentoring undergraduate student (Michael Jacob)	2023 - Present
Mentoring PhD student (Dhayaa Anbajagane) 2 papers	2023 - Present
Mentoring PhD student (Shub Agrawal) 1 paper in prep.	2023 - Present
Mentoring PhD student (Kunhao Zhong) 1 paper	2023 - Present

OUTREACH

May/Oct 2021	Press release for the DES Y3 analysis and interviews on international and national newspapers
March 2018, March 2019	Cosmology-related hands-on activities for high-school students visiting IFAE
April 2017	Cosmology seminar for high-school students visiting IFAE

REFERENCES

Prof. Ramon Miquel
Institut de Física d'Altes
Energies
& ICREA, Barcelona, Spain
rmiquel@ifae.es

Prof. Chihway Chang
Dept. of Astronomy &
Astrophysics,
University of Chicago and
senior KICP member
chihway@kicp.uchicago.edu

Prof. Bhuvnesh Jain
Dept. of Physics and
Astronomy
University of Pennsylvania
bjain@physics.upenn.edu

Prof. Gary Bernstein
Dept. of Physics and
Astronomy
University of Pennsylvania
garyb@physics.upenn.edu

Prof. Eduardo Rozo
Dept. of Physics,
University of Arizona
erozo@email.arizona.edu

LIST OF PUBLICATIONS

12 as corresponding author (which have collected more than 400 citations). According to NASA ADS, h-index of 41, 7000+ total citations, and a total of 108 publications. Publications are divided into two groups, depending on my contribution.

PUBLICATION WITH MAJOR CONTRIBUTIONS

Publications that I led, that one of my students led or where I played a leading role.

REFEREED

1. *Dark Energy Survey Year 3 results: simulation-based ν_w CDM inference with wavelet scattering and moments of weak lensing mass maps I – validation on simulations*
M. Gatti, N. Jeffrey, L. Whiteway, et al. (DES collaboration)
PRD, 2024 (in press)|[arXiv:2310.17557](#) | [ADS](#)
2. *Beyond the 3rd moment: A practical study of using lensing convergence CDFs for cosmology with DES Y3*
D. Anbajagane, C. Chang, A. Banerjee, T. Abel, **M. Gatti**, et al. (DES collaboration)
MNRAS, 2023| [arXiv:2308.03863](#) | [ADS](#)
3. *Detection of the significant impact of source clustering on higher-order statistics with DES Year 3 weak gravitational lensing data*
M. Gatti, N. Jeffrey, L. Whiteway, et al. (DES collaboration)
MNRAS Letters, 2023| [arXiv:2307.13860](#) | [ADS](#)
4. *Dark Energy Survey Year 3 Results: Redshift Calibration of the MagLim Lens Sample using Self-Organizing Maps and Clustering Redshifts*
MNRAS, 2023| G. Giannini, A. Alarcon, **M. Gatti**, et al. (DES collaboration)
[arXiv:2209.05853](#) | [ADS](#)
5. *Robust field-level inference with dark matter halos*
H. Sao, F. Villascusa-Navarro, P. Villanueva-Domingo, **M. Gatti**, et al.
ApJ, 2023| [arXiv:2209.06843](#) | [ADS](#)
6. *Dark Energy Survey Year 3 results: cosmology with moments of weak lensing mass maps*
M. Gatti, B. Jain, C. Chang, et al. (DES collaboration)
PRD, 2022| [arXiv:2110.10141](#) | [ADS](#)
7. *Dark Energy Survey Year 3 Results: Three-point Shear and Mass Aperture Measurements*
L. Secco, M. Jarvis, B. Jain, C. Chang, **M. Gatti**, et al. (DES collaboration)
PRD, 2022 | [arXiv:2201.05227](#) | [ADS](#)
8. *Dark energy survey year 3 results: Cosmology with peaks using an emulator approach*
D. Zuercher, J. Fluri, R. Sgier, T. Kacprzak, **M. Gatti**, et al. (DES collaboration)
MNRAS, 2022 | [arXiv:2110.10135](#) | [ADS](#)

9. *KarMMa - Kappa Reconstruction for Mass Mappings*
P. Fiedorowicz, E. Rozo, S. S. Boruah, C. Chang and **M. Gatti**,
MNRAS, 2022 | [arXiv:2105.14699](#) | [ADS](#)
10. *Dark Energy Survey Year 3 Results: Calibration of Lens Sample Redshift Distributions using Clustering Redshifts with BOSS/eBOSS*
R. Cawthon, J. Elvin-Poole, A. Porredon, M. Crocce, G. Giannini, **M. Gatti**. et al.
(DES collaboration)
MNRAS, 2022 | [arXiv:2012.12826](#) | [ADS](#)
11. *Cross-correlation of DES Year 3 lensing and ACT/Planck Sunyaev Zel'dovich Effect measurements I: measurements, systematics tests, and feedback model constraints*
M. Gatti, S. Pandey, et al. (DES & ACT collaborations)
PRD, 2022 | [arXiv:2108.01600](#) | [ADS](#)
12. *Cross-correlation of DES Year 3 lensing and ACT/PLANCK Sunyaev Zel'dovich Effect measurements II: Modeling and constraints on halo pressure profiles*
S. Pandey, **M. Gatti**, et al. (DES & ACT collaborations)
PRD, 2022 | [arXiv:2108.01600](#) | [ADS](#)
13. *Dark Energy Survey Year 3 Results: Clustering Redshifts – Calibration of the Weak Lensing Source Redshift Distributions with redMaGiC and BOSS/eBOSS*
M. Gatti, G. Giannini, et al. (DES collaboration)
MNRAS, 2022 | [arXiv:2012.08569](#) | [ADS](#)
14. *The DES view of the Eridanus supervoid and the CMB Cold Spot*
A. Kovacs, N. Jeffrey, **M. Gatti**, et al. (DES collaboration)
submitted to MNRAS, 2021 | [arXiv:2112.07699](#) | [ADS](#)
15. *Dark Energy Survey Year 3 results: curved-sky weak lensing mass map reconstruction*
N. Jeffrey, **M. Gatti (co-corresponding author)**, et al. (DES collaboration)
MNRAS, accepted for publication, 2021 | [arXiv:2105.13539](#) | [ADS](#)
16. *Dark Energy Survey Year 3 Results: Weak Lensing Shape Catalogue*
M. Gatti, E. Sheldon, et al. (DES collaboration)
MNRAS, accepted for publication, 2021 | [arXiv:2011.03408](#) | [ADS](#)
17. *Dark Energy Survey Year 3 results: cosmology with moments of weak lensing mass maps - validation on simulations*
M. Gatti, C. Chang, O Friedrich, J. Bhuvnesh et al. (DES collaboration))
MNRAS, 2020 | [arXiv:1911.05568](#) | [ADS](#)
18. *Dark Energy Survey Year 1 Results: calibration of redMaGiC redshift distributions in DES and SDSS from cross-correlations*
R. Cawthon, C. Davis, **M. Gatti**, et al. (DES collaboration)
MNRAS, 2018 | [arXiv:1712.07298](#) | [ADS](#)
19. *Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts - Methods and Systematics Characterization*
M. Gatti, P. Vielzeuf, C. Davis, et al. (DES collaboration)
MNRAS, 2018 | [arXiv:1709.00992](#) | [ADS](#)

20. *Discussing the distance bias on the estimation of Hi-GAL compact source physical properties*
A. Baldeschi, D. Elia, S. Molinari, S. Pezzuto, E. Schisano, **M. Gatti**, et al.
MNRAS, 2017 | [arXiv:1701.08035](#) | [ADS](#)
21. *Constraining AGN triggering mechanisms through the clustering analysis of active black holes*
M. Gatti, F. Shankar, V. Bouillot, et al.
MNRAS, 2016 | [arXiv:1511.08215](#) | [ADS](#)
22. *Physical properties of AGN host galaxies as a probe of supermassive black hole feeding mechanisms*
M. Gatti, N. Menci, A. Lamastra et al.
AA, 2015 | [arXiv:1412.7660](#) | [ADS](#)
23. *Triggering active galactic nuclei in hierarchical galaxy formation: Disk instability vs. Interactions*
N. Menci, **M. Gatti**, A. Lamastra et al.
AA, 2014 | [arXiv:1406.7740](#) | [ADS](#)

SUBMITTED

24. *Dark Energy Survey Year 3 results: simulation-based cosmological inference with wavelet harmonics, scattering transforms, and moments of weak lensing mass maps II. Cosmological results*
M. Gatti, G. Camapilla, et al. (DES collaboration)
[arXiv:2405.10881](#) | [ADS](#)
25. *Improving Convolutional Neural Networks for Cosmological Fields with Random Permutation*
K. Zhong, **M. Gatti**, and B. Jain
[arXiv:2403.01368](#) | [ADS](#)
26. *Dark Energy Survey Year 3 results: likelihood-free, simulation-based w CDM inference with neural compression of weak lensing map statistics*
N. Jeffrey, L. Whiteway, **M. Gatti**, et al. (DES collaboration)
[arXiv:2403.02314](#) | [ADS](#)
27. *Primordial non-Gaussianities with weak lensing: Information on non-linear scales in the Ulagam full-sky simulations*
D. Anbajagane, C. Chang, H. Lee, and **M. Gatti**
[arXiv:2310.02349](#) | [ADS](#)
28. *Late Time Modification of Structure Growth and the S8 Tension*
M-X Lin, B. Jain, M. Raveri, E. Baxter, C. Chang, **M. Gatti**, S. Lee, J. Muir
[arXiv:2308.16183](#) | [ADS](#)

29. *Sum-of-Parts Models: Faithful Attributions for Groups of Features*
W. You, H. Qu, **M. Gatti**, B. Jain., and E. Wong
[arXiv:2310.16316](#) | [ADS](#)

IN PREPARATION

30. *Dark Energy Survey Year 6 results: Weak Lensing Shape Catalogue, BFD*
M. Gatti, V. Wetzell, G. Bernstein, et al. (DES collaboration)
To be submitted in Summer 2024
31. *Vision Transformers for Parameter Inference from Weak Lensing*
S. Agrawal, **M. Gatti**, and B. Jain.
To be submitted in Summer 2024
32. *Compression methods for weak lensing statistics*
M. Park, **M. Gatti**, and B. Jain.
To be submitted in Summer 2024
33. *Response Clusterin Bias in Cosmic Shear*
Z. Conghao, M. Becker and **M. Gatti**
To be submitted in Summer 2024

NON REFEREED

34. *Dark Energy Survey Year 1 Results: Cross-Correlation Redshifts in the DES – Calibration of the Weak Lensing Source Redshift Distributions*
C. Davis, **M. Gatti**, R. Cawthon, et al. (DES collaboration)
(Main author left the field and did not submit the work to journals) |
[arXiv:1710.02517](#) | [ADS](#)

OTHER PUBLICATIONS

For these publications I contributed with data products, testing, validation or other infrastructure

REFEREED

35. *Robust sampling for weak lensing and clustering analyses with the Dark Energy Survey*
P. Lemos, (DES collaboration, including **M. Gatti**)
submitted to MNRAS, 2022| [arXiv:2202.08233](#) | [ADS](#)
36. *Dark Energy Survey Year 3 results: magnification modelling and impact on cosmological constraints from galaxy clustering and galaxy-galaxy lensing*
J. Elvin-Poole, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2209.09782](#) | [ADS](#)

37. *The Dark Energy Survey Year 3 and eBOSS: constraining galaxy intrinsic alignments across luminosity and colour space*
S. Samuroff, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2212.11319](#) | [ADS](#)
38. *Using host galaxy spectroscopy to explore systematics in the standardization of Type Ia supernovae*
M. Dixon, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2206.12085](#) | [ADS](#)
39. *Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and galaxy-galaxy lensing using the MAGLIM lens sample*
A. Porredon, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2105.13546](#) | [ADS](#)
40. *Photometric Properties of Jupiter Trojans detected by the Dark Energy Survey*
J. Pan, (DES collaboration, including **M. Gatti**)
PSJ, 2023| [arXiv:2211.10719](#) | [ADS](#)
41. *Consistent lensing and clustering in a low-S8 Universe with BOSS, DES Year 3, HSC Year 1, and KiDS-1000*
A. Amon, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2202.07440](#) | [ADS](#)
42. *The Dark Energy Survey Supernova Program results: Type Ia Supernova brightness correlates with host galaxy dust*
C. Meldorf, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2206.06928](#) | [ADS](#)
43. *Joint analysis of Dark Energy Survey Year 3 data and CMB lensing from SPT and Planck. I. Construction of CMB lensing maps and modeling choices*
Y. Omori, (DES collaboration, including **M. Gatti**)
PRD, 2023| [arXiv:2203.12439](#) | [ADS](#)
44. *Joint analysis of Dark Energy Survey Year 3 data and CMB lensing from SPT and Planck. II. Cross-correlation measurements and cosmological constraints*
C. Chang, (DES collaboration, including **M. Gatti**)
PRD, 2023| [arXiv:2203.12440](#) | [ADS](#)
45. *Timing the r-process Enrichment of the Ultra-faint Dwarf Galaxy Reticulum II*
J. Simon, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2212.00810](#) | [ADS](#)
46. *Joint analysis of Dark Energy Survey Year 3 data and CMB lensing from SPT and Planck. III. Combined cosmological constraints*
DES collaboration, including **M. Gatti**
PRD, 2023| [arXiv:2206.10824](#) | [ADS](#)
47. *A galaxy-driven model of type Ia supernova luminosity variations*
P. Wiseman., (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2207.05583](#) | [ADS](#)

48. *Dark Energy Survey Year 3 results: Imprints of cosmic voids and superclusters in the Planck CMB lensing map*
A. Kovacs, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2203.11306](#) | [ADS](#)
49. *Using Host Galaxy Spectroscopy to Explore Systematics in the Standardisation of Type Ia Supernovae*
M. Dixon, (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2206.12085](#) | [ADS](#)
50. *Joint analysis of DES Year 3 data and CMB lensing from SPT and Planck III: Combined cosmological constraints*
DES collaboration, including **M. Gatti**
PRD, 2022| [arXiv:2206.10824](#) | [ADS](#)
51. *Dark Energy Survey Year 3 results: Magnification modeling and impact on cosmological constraints from galaxy clustering and galaxy-galaxy lensing*
J. Elvin-Poole, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2209.09782](#) | [ADS](#)
52. *Cosmic shear in harmonic space from the Dark Energy Survey Year 1 Data: compatibility with configuration space results*
H. Camacho, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2111.07203](#) | [ADS](#)
53. *Dark energy survey year 3 results: High-precision measurement and modeling of galaxy-galaxy lensing*
J. Prat et al. (DES collaboration, including **M. Gatti**)
PRD, 2022 | [arXiv:2105.13541](#) | [ADS](#)
54. *Non-local contribution from small scales in galaxy-galaxy lensing: comparison of mitigation schemes*
J. Prat (DES collaboration, including **M. Gatti**)
MNRAS, 2023| [arXiv:2212.0373](#) | [ADS](#)
55. *Mapping Variations of Redshift Distributions with Probability Integral Transforms*
J. Myles, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2210.03130](#) | [ADS](#)
56. *Constraining the Baryonic Feedback with Cosmic Shear Using the DES Year-3 Small-Scale Measurements*
A. Chen, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2206.08591](#) | [ADS](#)
57. *A measurement of the mean central optical depth of galaxy clusters via the pairwise kinematic Sunyaev-Zel'dovich effect with SPT-3G and DES*
E. Schiappucci, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2207.11937](#) | [ADS](#)
58. *Dark Energy Survey Year 3 Results: Constraints on extensions to Λ CDM with weak lensing and galaxy clustering*
DES collaboration, including **M. Gatti**
PRD, 2022| [arXiv:2207.05766](#) | [ADS](#)

59. *Core-collapse Supernovae in the Dark Energy Survey: Luminosity Functions and Host Galaxy Demographics*
M. Grayling, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2207.08520](#) | [ADS](#)
60. *Probing gravity with the DES-CMASS sample and BOSS spectroscopy*
S. Lee, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2104.14515](#) | [ADS](#)
61. *Dark Energy Survey Year 3 results: Galaxy-halo connection from galaxy-galaxy lensing*
G. Zacharegkas, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2106.08438](#) | [ADS](#)
62. *Dark Energy Survey Year 3 Results: Cosmological Constraints from Galaxy Clustering and Weak Lensing*
T. Abbott, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13549](#) | [ADS](#)
63. *Dark Energy Survey Year 3 results: Cosmological constraints from galaxy clustering and galaxy-galaxy lensing using the MAGLIM lens sample*
A. Porredon, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13546](#) | [ADS](#)
64. *Dark Energy Survey Year 3 Results: Cosmology from Cosmic Shear and Robustness to Modeling Uncertainty*
L. Secco, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13544](#) | [ADS](#)
65. *Dark Energy Survey Year 3 Results: Cosmology from Cosmic Shear and Robustness to Data Calibration*
A. Amon, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13543](#) | [ADS](#)
66. *Dark Energy Survey Year 3 Results: Exploiting small-scale information with lensing shear ratios*
C. Sanchez, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13542](#) | [ADS](#)
67. *Dark Energy Survey Year 3 Results: Covariance Modelling and its Impact on Parameter Estimation and Quality of Fit*
O. Friedrich, (DES collaboration, including **M. Gatti**)
MNRAS, 2021| [arXiv:2012.08568](#) | [ADS](#)
68. *Dark energy survey year 3 results: cosmological constraints from the analysis of cosmic shear in harmonic space*
C. Doux, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2203.07128](#) | [ADS](#)
69. *OzDES Reverberation Mapping Program: Mg II Lags and R-L relation*
Y. Zhefu, (DES collaboration, including **M. Gatti**)
MNRAS, 2022| [arXiv:2208.05491](#) | [ADS](#)

70. *Dark Energy Survey year 3 results: Constraints on cosmological parameters and galaxy-bias models from galaxy clustering and galaxy-galaxy lensing using the redMaGiC sample*
S. Pandey., (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13545](#) | [ADS](#)
71. *The DECam Local Volume Exploration Survey Data Release 2*
A. Drlica-Wagner, (DES collaboration, including **M. Gatti**)
ApJS, 2022| [arXiv:2203.16565](#) | [ADS](#)
72. *Dark Energy Survey Year 3 results: Cosmology from combined galaxy clustering and lensing validation on cosmological simulations*
J. De rose, (DES collaboration, including **M. Gatti**)
PRD, 2022| [arXiv:2105.13547](#) | [ADS](#)
73. *Milky Way Satellite Census. IV. Constraints on Decaying Dark Matter from Observations of Milky Way Satellite Galaxies*
S. Mau, (DES collaboration, including **M. Gatti**)
ApJ, 2022| [arXiv:2201.11740](#) | [ADS](#)
74. *Joint analysis of DES Year 3 data and CMB lensing from SPT and Planck II: Cross-correlation measurements and cosmological constraints*
A. Leauthaud, (DES collaboration, including **M. Gatti**)
MNRAS, 2021| [arXiv:2111.13805](#) | [ADS](#)
75. *DeepZipper: A Novel Deep-learning Architecture for Lensed Supernovae Identification*
R. Morgan, (DES collaboration, including **M. Gatti**)
ApJ, 2021| [arXiv:2112.01541](#) | [ADS](#)
76. *Measuring Cosmological Parameters with Type Ia Supernovae in redMaGiC galaxies*
R. Chen, (DES collaboration, including **M. Gatti**)
ApJ, 2021| [arXiv:2202.10480](#) | [ADS](#)
77. *Dark Energy Survey Year 3 Results: Redshift Calibration of the Weak Lensing Source Galaxies*
J. Myles, (DES collaboration, including **M. Gatti**)
MNRAS 2021| [arXiv:2012.08566](#) | [ADS](#)
78. *Assessing tension metrics with dark energy survey and Planck data*
P. Lemos, (DES collaboration, including **M. Gatti**)
MNRAS, 2021| [arXiv:2012.09554](#) | [ADS](#)
79. *DES Y3 results: Blending shear and redshift biases in image simulations*
N. MacCrann, (DES collaboration, including **M. Gatti**)
MNRAS 2022| [arXiv:2012.08567](#) | [ADS](#)
80. *The mass and galaxy distribution around SZ-selected clusters*
T. Shin, (DES collaboration, including **M. Gatti**)
MNRAS, 2021| [arXiv:2105.05914](#) | [ADS](#)
81. *Consistency of cosmic shear analyses in harmonic and real space*
C. Doux, (DES collaboration, including **M. Gatti**)
MNRAS, 2020| [arXiv:2011.06469](#) | [ADS](#)

82. *Dark energy survey internal consistency tests of the joint cosmological probes analysis with posterior predictive distributions*
C. Doux, (DES collaboration, including **M. Gatti**)
MNRAS, 2020 | [arXiv:2011.03410](#) | [ADS](#)
83. *Dark Energy Survey Year 1 Results: Cosmological Constraints from Cluster Abundances, Weak Lensing, and Galaxy Correlations*
C. To, (DES collaboration, including **M. Gatti**)
PRL, 2020 | [arXiv:2010.01138](#) | [ADS](#)
84. *Dark energy survey year 1 results: Constraining baryonic physics in the Universe*
H. Huang, (DES collaboration, including **M. Gatti**)
MNRAS, 2020 | [arXiv:2007.15026](#) | [ADS](#)
85. *Dark Energy Survey year 3 results: point spread function modelling*
M. Jarvis, (DES collaboration, including **M. Gatti**)
MNRAS, 2020 | [arXiv:2011.03409](#) | [ADS](#)
86. *μ masses: weak-lensing calibration of the Dark Energy Survey Year 1 redMaPPer clusters using stellar masses*
M. E. S Pereira, (DES collaboration, including **M. Gatti**)
MNRAS, 2020 | [arXiv:2006.10162](#) | [ADS](#)
87. *Dark Energy Survey Year 1 Results: Cosmological constraints from cluster abundances and weak lensing*
T. Abbot, (DES collaboration, including **M. Gatti**)
PRD, 2020 | [arXiv:2002.11124](#) | [ADS](#)
88. *Dark Energy Survey Year 1 Results: Cosmological constraints from cluster abundances and weak lensing*
T. Abbot, (DES collaboration, including **M. Gatti**)
PRD, 2020 | [arXiv:2002.11124](#) | [ADS](#)
89. *Dark Energy Survey Year 1 results: The relationship between mass and light around cosmic voids*
Y. Fang, (DES collaboration, including **M. Gatti**)
MNRAS, 2019 | [arXiv:1909.01386](#) | [ADS](#)
90. *Detection of cross-correlation between gravitational lensing and gamma rays*
S. Ammazzalorso, (DES collaboration, including **M. Gatti**)
PRL, 2020 | [arXiv:1907.13484](#) | [ADS](#)
91. *Dark Energy Survey Year 1 Results: Wide field mass maps via forward fitting in harmonic space*
B. Mawdsley, et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2020 | [arXiv:1905.12682](#) | [ADS](#)
92. *Dark Energy Survey Year 1 Results: Constraints on Intrinsic Alignments and their Colour Dependence from Galaxy Clustering and Weak Lensing*
S. Samuroff et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2019 | [arXiv:1811.06989](#) | [ADS](#)

93. *Dark Energy Survey Year 1 Results: Cross-correlation between Dark Energy Survey Y1 galaxy weak lensing and South Pole Telescope+ Planck CMB weak lensing*
Y. Omori et al. (DES collaboration, including **M. Gatti**)
PRD, 2019 | [arXiv:1810.02441](#) | [ADS](#)
94. *Survey geometry and the internal consistency of recent cosmic shear measurements*
M. Troxel et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2018 | [arXiv:1804.10663](#) | [ADS](#)
95. *Density split statistics: Cosmological constraints from counts and lensing in cells in DES Y1 and SDSS data*
D. Gruen et al. (DES collaboration, including **M. Gatti**)
PRD, 2018 | [arXiv:1710.05045](#) | [ADS](#)
96. *Cross-correlation redshift calibration without spectroscopic calibration samples in DES Science Verification Data*
C. Davis, et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2018 | [arXiv:1707.08256](#) | [ADS](#)
97. *Dark Energy Survey year 1 results: Cosmological constraints from galaxy clustering and weak lensing*
T. Abbott et al. (DES collaboration, including **M. Gatti**)
PRD, 2018 | [arXiv:1708.01530](#) | [ADS](#)
98. *Dark Energy Survey Year 1 Results: redshift distributions of the weak-lensing source galaxies*
B. Hoyle et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2018 | [arXiv:1708.01532](#) | [ADS](#)
99. *Dark Energy Survey Year 1 Results: Curved-Sky Weak Lensing Mass Map*
C. Chang et al. (DES collaboration, including **M. Gatti**)
MNRAS, 2018 | [arXiv:1708.01535](#) | [ADS](#)
100. *Dark Energy Survey Year 1 Results: Galaxy-Galaxy Lensing*
J. Prat et al. (DES collaboration, including **M. Gatti**)
PRD, 2018 | [arXiv:1708.01537](#) | [ADS](#)
101. *Dark Energy Survey Year 1 Results: Cosmological Constraints from Cosmic Shear*
M. Troxel et al. (DES collaboration, including **M. Gatti**)
PRD, 2018 | [arXiv:1708.01538](#) | [ADS](#)

SUBMITTED

102. *Lessons Learned from the Two Largest Galaxy Morphological Classification Catalogues built by Convolutional Neural Networks*
C. Ting-Yun, (DES collaboration, including **M. Gatti**)
MNRAS, 2022 | [arXiv:2209.06897](#) | [ADS](#)
103. *Cosmological shocks around galaxy clusters: A coherent investigation with DES, SPT & ACT*
D. Anbajagane, (DES collaboration, including **M. Gatti**)
submitted to MNRAS, 2023 | [arXiv:2310.00059](#) | [ADS](#)

104. *DES Y3 + KiDS-1000: Consistent cosmology combining cosmic shear surveys*
DES collaboration, including **M. Gatti**
submitted to PRD, 2023| [arXiv:2305.17173](#) | [ADS](#)
105. *Cosmological constraints from the tomography of DES-Y3 galaxies with CMB lensing from ACT DR4*
G. A. Marques, (DES collaboration, including **M. Gatti**)
submitted to JCAP, 2023| [arXiv:/2306.17268](#) | [ADS](#)
106. *Cosmology from Cross-Correlation of ACT-DR4 CMB Lensing and DES-Y3 Cosmic Shear*
S. Shaikh, (DES collaboration, including **M. Gatti**)
submitted to MNRAS, 2023| [arXiv:/2309.04412](#) | [ADS](#)
107. *Building an Efficient Cluster Cosmology Software Package for Modeling Cluster Counts and Lensing*
M. Aguena, (DES collaboration, including **M. Gatti**)
submitted to PRD, 2023| [arXiv:/2309.065932](#) | [ADS](#)
108. *A Sample of Dust Attenuation Laws for DES Supernova Host Galaxies*
J. Duarte, (DES collaboration, including **M. Gatti**)
submitted to MNRAS, 2023| [arXiv:/2211.14291](#) | [ADS](#)
109. *Galaxy Clusters Discovered via the Thermal Sunyaev-Zel'dovich Effect in the 500-square-degree SPTpol Survey*
L. Bleem, (DES collaboration, including **M. Gatti**)
submitted to PRD, 2023| [arXiv:/2311.07512](#) | [ADS](#)
110. *The Dark Energy Survey Supernova Program: Cosmological Analysis and Systematic Uncertainties*
M. Vincenzi, (DES collaboration, including **M. Gatti**)
submitted to PRD, 2024| [arXiv:/2401.02945](#) | [ADS](#)
111. *The Dark Energy Survey: Cosmology Results With 1500 New High-redshift Type Ia Supernovae Using The Full 5-year Dataset*
DES collaboration, including **M. Gatti**
submitted to PRD, 2024| [arXiv:/2401.02929](#) | [ADS](#)
112. *SPT Clusters with DES and HST Weak Lensing. II. Cosmological Constraints from the Abundance of Massive Halos*
S. Boquet, (DES collaboration, including **M. Gatti**)
submitted to PRD, 2024| [arXiv:/2401.02075](#) | [ADS](#)

Job Career

- 06.2023–present **Postdoctoral position, INAF - OA Trieste**, *Trieste*, Subject: Analysis and interpretation of multi-band observations of AGN and their host galaxies.
- 01.2022–05.2023 **Postdoctoral position, INAF - OA Arcetri**, *Firenze*, Subject: Sfruttamento scientifico di SRT ad altissima frequenza e sinergie con ALMA (OR1).
- 03.2021–01.2022 **Postdoctoral position, INAF - OA Arcetri**, *Firenze*, Subject: Modelling and analysis of the star-forming ISM in DustPedia galaxies.
- 01.2021–03.2021 **Physics and Mathematics teacher, Liceo Scientifico A. Roiti**, *Ferrara*.

Supervision of PhD students

- 2023 - ongoing Training of PhD student M.V. Zanchettin, Scuola Internazionale Superiore di Studi Avanzati (SISSA), Trieste, Italy.
- 2023 Training of PhD student R. Tripodi, Physics Department, UniTs, Italy.

Expertise

Data handling Excellent practice in managing, reducing, and analyzing large data sample, with automatized scripts (mainly in Python).

Data analysis Large experience in data analysis and interpretation. Solid background in decomposition spectral decomposition at different wavelengths (e.g., X-ray, mid-IR, sub-mm), spectral energy distribution analysis, comparison between data and models, application of statistical methods to data analysis..

Multi-bands data Large experience in handling and comparing multi-wavelength data, namely: in the X-rays, in the optical and IR (both mid-IR, far-IR) bands, and at sub-millimeter wavelength..

Excellent practice in data reduction, visualization, and relatives packages for sub-mm facilities such as ALMA, NOEMA, and APEX.

Excellent practice in data reduction, visualization, and relatives packages for the vast majority of the X-ray telescopes, e.g. *NuSTAR*, *XMM-Newton*, *Chandra*, *Suzaku*.

Archive data querying Wide experience in data retrieving from the ESO, ALMA, SDSS, HEASARC, and HST, JWSTT archives. Excellent practice with NED, SIMBAD and VizieR services.

Observational experience Remote-controlled observations with the single-dish antenna in Medicina (CL, CH, and X band receivers).

Successful proposals (as P.I.) **NuSTAR – XMM-Newton - Cycle 8**, "*Unveiling the intrinsic X-ray properties of the 12 μ m SY2 sample: towards a complete X-ray coverage*", ID:8200, Description: granted combined *NuSTAR–XMM-Newton* observing time to detect the broadband (~ 0.5 -30 keV) X-ray emission for 2 local Seyfert 2 galaxies.

ALMA - Cycle 8, "*Unveiling the AGN impact on the ISM in local Seyfert2 galaxies by tracing the dense gas at sub-kpc scale*", 2021, ID: 2021.1.01727.S, 10.6h, Description: ALMA band 5 observations targeting emission lines of dense molecular gas tracers (HCN and HCO⁺) to study PDRs and XDRs in two local Seyfert 2 galaxies..

NuSTAR – XMM-Newton - Cycle 7, "*Unveiling the intrinsic X-ray properties of the 12 μ m SY2 sample: towards a complete X-ray coverage*", ID:7171, Description: granted combined *NuSTAR–XMM-Newton* observing time to detect the broadband (~ 0.5 -30 keV) X-ray emission for 5 local Seyfert 2 galaxies.

NuSTAR – XMM-Newton - Cycle 6, "*Unveiling the intrinsic X-ray properties of the 12 μ m SY2 sample: towards a complete X-ray coverage*", ID:06158, 3h, Description: granted combined *NuSTAR–XMM-Newton* observing time to detect the broadband (~ 0.5 -30 keV) X-ray emission for 2 local Seyfert 2 galaxies.

APEX, *"Does the AGN influence the host galaxy depletion time?"*, 2018, ID:0103.F-9311, 18h, Description: granted 18h observing time to measure the CO(2-1) emission lines for 25 local Seyfert 2 galaxies.

Successful proposals (as co-I.) **ESO P114**, *"Nuclear feedback and SMBH growth in quasars at the Reionization Epoch"*, 2024 (ID:6-24), PI: Zappacosta, Description: 45.1 hr observing seven $z > 6.5$ quasars with VLT - X-Shooter.

Medicina-SRT, *"The Spectral Energy Distribution of nearby galaxies from GHz to THz frequencies"*, 2024 (ID:6-24), PI: Bianchi, Description: We propose to use Medicina 32m receivers in the CC and CH band (64hr) at SRT to make continuum OTF maps for the investigation of the SED of moderately resolved, nearby, star-forming galaxies.

NuSTAR – XMM-Newton - Cycle 10, *"A NuSTAR WISSHFUL program: X-ray corona and winds in quasars at Cosmic Noon"*, 2024, ID:10147, PI: Lanzuisi, Description: Large program granting NuSTAR observations for 7 targets, to be coeval to previously approved XMM-Newton large program..

JWST - C3, *"MIRACLE: Mid-IR Activity of Circumnuclear Line Emission"*, 2023, ID: 6138, PI: Marconcini, Description: We propose to observe a sample of local AGN with MIRI/MRS to investigate the properties of ISM.

JWST - C3, *"The first multi-scale and multi-phase characterization of black hole feedback at $z>6$ "*, 2023, ID: 5192, PI: Bischetti, Description: We propose to observe an almost unique BAL at $z>6$ to study the nature of the extended [CII] 158 μm diffuse emission.

Medicina-SRT, *"The Spectral Energy Distribution of nearby galaxies from GHz to THz frequencies"*, 2023 (ID:17-23), PI: Bianchi, Description: We propose to use Medicina 32m receivers in the CC band (8 hr) and SRT K band (66 hr) to make continuum OTF maps for the investigation of the SED of moderately resolved, nearby, star-forming galaxies.

NOEMA - W23, *"H₂ reservoirs and gas-to-dust ratio in QSO host galaxies at $z>6$ "*, 2022, ID: W23DB, PI: Tripodi, Description: We propose to observe CO(6-5) and (7-6) in hyper-luminous quasars of the HYPERION sample.

ALMA C10 - JWST, *"Dissecting the kinematics of the central region of a $z \sim 6$ QSO with ALMA and JWST"*, 2023, ID:2023.1.00452.S), PI: Tripodi, Description: We propose to investigate the innermost region of the QSO host galaxy SDSS J2310+1855 at $z \sim 6$, to unveil the host-galaxy and BH coexistence at the Epoch of Reionization.

NOEMA - S23, *"H₂ reservoirs and cosmic density at redshift 7-7.5"*, 2022, ID: S23CX, PI: Feruglio, Description: We propose to observe CO(6-5) and (7-6) in a sample 5 $z>7$ luminous quasars to probe the H₂ density at high redshift.

Medicina, *"The Spectral Energy Distribution of nearby galaxies from GHz to THz frequencies"*, 2022 (ID:9-22), PI: Bianchi, Description: We propose to use Medicina 32m receivers in the C-low (5 GHz), C-high (6.7 GHz) and X (8.3 GHz) bands to make continuum OTF maps for the investigation of the SED of 8 moderately resolved, nearby, star-forming galaxies..

XMM-Newton, *"High-redshift quasars: Cosmology and Physics"*, 2020 (ID:088430), PI: Nardini, Description: the proposal aims to study a sample of high redshift, $z \sim 4$, AGN for the purpose of doing cosmology and establishing the fraction of X-ray weak quasars..

SALT, *"Spectroscopic Survey of IR 12MGS Seyfert Galaxies"*, 2020 (ID:2020-2-MLT-006), PI: Marchetti, Description: the proposal aims to provide complete and homogeneous optical spectroscopy to a sample of local AGN, which is currently the best local benchmark to understand the physics in composite objects (i.e., showing both star-formation and AGN activity)..

XMM-Newton, *"High-redshift quasars: Cosmology and Physics"*, 2019 (ID:084497), Description: the proposal aims to study a sample of high redshift, $z \sim 4$, AGN for the purpose of doing cosmology.

SALT, "*Spectroscopic Survey of IR 12MGS Seyfert Galaxies*", 2018 (ID:2018-1-SCI-029), PI: Marchetti, Description: the proposal aims to provide complete and homogeneous optical spectroscopy to a sample of local AGN, which is currently the best local benchmark to understand the physics in composite objects (i.e., showing both star-formation and AGN activity)..

Fundings & Awards

Marco Polo Fellowship ($\sim$ €4k) for a five months visiting period at the European Southern Observatory (ESO, Garching bei München, DE), Project: "*The impact of AGN on the host-galaxy ISM*", under the supervision of Dr. Evanthia Hatziminaoglou, 2019-2020.

Organization of events

As member of the Local Organizer Committee

2019 **X-ray Astronomy 2019 - "Current Challenges and New Frontiers in the Next Decade"**, CNR/INAF Research Area, Bologna, 2-6.09.2019.

2019 **ALMABO 2019 - "Views on the Interstellar Medium in galaxies in the ALMA era"**, Bologna, 8-13.09.2019.

Group meeting organizer

03.2022-05.2023 **Organizer of the weekly Extragalactic Meeting**, INAF - Osservatorio Astronomico di Arcetri, Florence, 03.2022-present.

Outreach Activities & Media

2022-present Translator for the project "*Multilingual Glossary*" of the "IAU-Office of Astronomy for Education".

11.2021 Video contribution to *ALMA Explained - The European ARC Network*.

05.2020 Participation as tutor to *ALMA Orienta*, open day at the University of Bologna..

Workshops, Conferences, Colloquia

Contributions to International Meetings

European Astronomical Society Annual Meeting 2024, Padova, IT, 01-05.07.2024.
Talk: "*Dust and molecular gas properties in luminous quasar in the early Universe* "

European Astronomical Society Annual Meeting 2024, Padova, IT, 01-05.07.2024.
Flash-talk: "*Tracing galaxy assembly at Cosmic Noon*"

GASPISA2024: The physical processes shaping the stellar and gaseous histories of galaxies, Pisa, IT, 27-31.05.2024.

Flash-talk: "*Tracing feeding/feedback processes with molecular multi-line diagnostics in two nearby Seyferts 2* "

Recipes to Regulate Star Formation at All Scales: From the Nearby Universe to the First Galaxies, Baltimore, MD, USA, 15-19.04.2024.

Flash-talk: "*The coevolution of star formation and SMBH accretion at Cosmic noon*"

Galaxy Formation in Hangzhou: Observations and Physics of AGN Feedback, Hangzhou, CN, 09-13.10.2023.

Talk: "*Luminous quasars as tracers of the early galaxy assembly at Cosmic noon*"

European Astronomical Society Annual Meeting 2023, Krakow, PL, 10.07-14.07.2023.

Talk: "*Investigating molecular gas scaling relations in the local Universe: What is driving the star formation cycle?*"

Fifth Workshop on Millimetre Astronomy in Italy, Bologna, IT, 12-14.06.2023.

Talk: *"Investigating molecular gas scaling relations in the local Universe: What drives the cycle of star formation?"*

2nd Submillimeter and Millimeter conference, Moskow, RU, online, 17-19.04.2023.

Talk: *"Revealing the Molecular Gas-Rich Circumnuclear Region of two Nearby Deeply Obscured AGN"*

MAYA: Meeting of ALMA Young Astronomers 2023, online, 6-10.03.2023.

Talk: *"Revealing the circumnuclear star-forming region in two nearby Seyferts 2"; Session Chair*

Torus 2022 Workshop - "Smoke and Mirrors", Leiden, NL, 13-15.12.2022.

Talk: *"Unveiling Compton-thick AGN with NuSTAR and mid-IR observations"*

European Astronomical Society Annual Meeting 2022, Valencia, ES, 27.06-01.07.2022.

Poster #1: *"Resolving ISM scaling relations in nearby galaxies - A pilot project in the DustPedia sample"; Poster #2:* *"Mapping molecular gas in nearby galaxies - The new SRT receiver"*

Active Galactic Nuclei XIV - "The Renaissance of Black Holes and Galaxies", Florence, IT, 23-27.05.2022.

Talk: *"Unveiling Compton-thick AGN with NuSTAR and mid-IR observations"*

Multiline diagnostics of the ISM, Nice, FR, 04-06.04.2022.

Poster: *"Unveiling the AGN impact on the ISM in local Seyfert 2 galaxies"*

Quasars and Galaxies through Cosmic Time, Online, 24-27.01.2022.

Poster: *"Unveiling the AGN intrinsic power and its effect on the host-galaxy ISM"*

Submillimeter and Millimeter Astronomy: Objectives and Instruments, AstroSpace-Center (online), Moscow, RU, 12-16.04.2021.

Talk: *"Unveiling the AGN intrinsic power and its effect on the host-galaxy ISM"*

X-ray Astronomy 2019, "Current Challenges and New Frontiers in the Next Decade", CNR/INAF Research Area, Bologna, IT, 8-13.09.2019.

Talk: *"Unveiling the intrinsic AGN strength in a 12 micron-selected Seyfert 2 sample"*

ALMABO 2019, "Views on the Interstellar Medium in galaxies in the ALMA era", Bologna, IT, 2-6.09.2019.

Poster: *"The complex gas kinematics in the nuclear region of NGC7213"*

SPICA2019 - "Exploring the Infrared Universe: The Promise of SPICA", Island of Crete, GR, 20-23.05.2019.

Poster: *"The AGN impact on the host-galaxy ISM in the local Universe"*

ALMA Science and Proposals Workshop, Istituto di Radioastronomia, Bologna, IT, 25-27.02.2019.

Talk: *"The complex gas kinematics in the nuclear region of NGC 7213"*

AGN13 - "Beauty and the Beast", Milan, IT, 9-12.10.2018.

Talk: *"Quasars as standard candles. The nonlinear relation between UV and X-ray emission at high redshift"*

10th IRAM millimeter interferometry school, IRAM headquarters, Grenoble, FR, 1-5.10.2018.

Poster: *"The complex gas kinematics in the nuclear region of NGC7213"*

Invited Colloquia & Short Seminars

Institute for Fundamental Physics of the Universe (IFPU), Trieste, IT, 17.11.2023.

Talk: *"Unveiling the AGN impact on the ISM: a journey across cosmic time"*

University of Milano Bicocca, Milano, IT, 14.11.2022.

Talk: *"Unveiling the AGN impact on the ISM in local Seyfert 2 galaxies"*

European Southern Observatory (ESO), Garching bei München, DE, 02.2020.

Talk: *"The impact of AGN activity on the host-galaxy ISM in the local Universe"*

European Southern Observatory (ESO), Garching bei München, DE, 01.2020.

Talk: *"Quasars as standard candles. The nonlinear relation between UV and X-ray emission at high redshift"*

Other attended Conferences, workshop, and schools

Meeting IFPU: The problematic existence of massive black holes in the early Universe, (Trieste, IT), 16-20.10.2023.

Meeting HSC: HYPERION, WISSH & Friends, (Bologna, IT), 24-25.05.2023.

MeerKAT+ science meeting, Bologna, IT, 23.06.2022.

The next generation mid/far-IR space missions: Formulating a European perspective, Paris (online), 19-21.01.2022.

The Third National Workshop on the SKA Project - "The Italian Route to the SKAO Revolution", Bologna (online), IT, 4-8.10.2021.

ISM 2021, structure, characteristic scales, and star formation, Beirut (online), Lebanon, 11-14.05.2021.

IV. Workshop on millimetre and submillimetre astronomy in Italy, European ALMA Regional Centre, Bologna, IT, 7-10.11.2017.

The X-ray Universe 2017, XMM-Newton Science Operations, Rome, IT, 6-9.06.2017.

GGI Lectures on the Theory of Fundamental Interactions, Galileo Galilei Institute for Theoretical Physics, Firenze, IT, 01.2016.

Lecture attended: *Early Universe*, lecturer V. RUBAKOV

Education

- 11.2017–12.2020 **PhD in Astrophysics, Alma Mater Studiorum - Università di Bologna**, Bologna, Thesis: *"The impact of AGN on the host-galaxy ISM"*, Subject: A multi-wavelength study aimed at assessing the impact of the nuclear activity on the properties of the host-galaxy ISM in the local Universe, Supervisors: Prof. C. Vignali, Dr. F. Pozzi, Dr. C. Gruppioni.
- 10.2014–10.2017 **M. Sc. in Astrophysics, Università degli Studi di Firenze**, Firenze, Thesis: *"Quasars as High Redshift Standard Candles"*, Subject: A study of the non-linear UV/X-ray luminosity relation in quasars at redshift $z > 4$, and its cosmological application, Supervisor: Prof. G. Risaliti.
Final grades: 110/110 cum laude
- 09.2010–04.2014 **B. Sc. in Physics and Astrophysics, Università degli Studi di Firenze**, Firenze, Thesis: *"Relationship between Black Holes and their Host Galaxies"*, Subject: An analysis of BH-host galaxy relations toward the formulation of a fundamental one, Supervisor: Prof. A. Marconi.
Final grades: 105/110
- 09.2005–07.2010 **Maturità Scientifica, Liceo Scientifico P.N.I. (Piano Nazionale di Informatica)**, ISTITUTO B. RUSSELL I. NEWTON, Scandicci (FI).
Final grades: 90/100

Miscellanea

Teaching Full High School Professor qualification, A027 class (Maths and Physics), 2022-present.
Two months (01.2021-02.2021) as Maths and Physics Professor at the Liceo scientifico Roiti, Ferrara, IT, A027 class (Maths and Physics).

Computer skills

Advanced PYTHON, L^AT_EX
Intermediate C, Fortran

Languages

Italian **Mother tongue**

English	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	-
	C2	C2	C1	C1	C1

German	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	-
	A2	B1	A2	A2	A2

French	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	-
	B1	B2	A2	A2	A2

Substitutive declaration of certification

- ENG The information contained in this "curriculum vitae et studiorum" is made under the personal responsibility of the undersigned, pursuant to Articles 46 and 47 of Presidential Decree No. 445 of December 28, 2000, and subsequent amendments and additions, aware of the criminal liability provided for in Article 76 of the same Decree for cases of falsity in deeds and false statements.
- IT Le informazioni contenute nel presente "curriculum vitae et studiorum" sono rese sotto la personale responsabilità del sottoscritto, ai sensi degli articoli 46 e 47 del Decreto del Presidente della Repubblica 28 dicembre 2000, numero 445, e successive modifiche ed integrazioni, consapevole della responsabilità penale prevista dall'articolo 76 del medesimo Decreto per le ipotesi di falsità in atti e dichiarazioni mendaci.

Francesco Ursini

RESEARCH INTERESTS

X-ray astronomy – Active galactic nuclei – Radio galaxies – Black hole and neutron star X-ray binaries

WORK EXPERIENCE

Ricercatore TDA a tempo pieno (Non-tenure researcher, full time)

Università degli Studi Roma Tre [1 Jul 2022 – Current]

Rome, Italy

High-energy astrophysics, accretion onto compact objects

Assegnista di Ricerca (Postdoc)

Università degli Studi Roma Tre [28 Feb 2021 – 30 Jun 2022]

Rome, Italy

Black hole winds and the baryon life cycle of galaxies

Assegnista di Ricerca (Postdoc)

Università degli Studi Roma Tre [29 Feb 2020 – 27 Feb 2021]

Rome, Italy

Support activities to the IXPE mission

Assegnista di Ricerca (Postdoc)

INAF-Osservatorio di Astrofisica e Scienza dello spazio di Bologna [30 Apr 2017 – 27 Feb 2020]

Bologna, Italy

X-ray spectral analysis of high-energy sources, primarily active galactic nuclei

QUALIFICATION

Abilitazione Scientifica Nazionale alle funzioni di professore universitario di II fascia, settore concorsuale 02/C1 – Astronomia, Astrofisica, Fisica della Terra e dei Pianeti, Bando D.D. 553/2021 (National Scientific Qualification to function as Associate Professor in Italian Universities, scientific sector 02/C1 – Astronomy, Astrophysics, Earth and Planetary Physics) [5 Jun 2023 – 5 Jun 2034]

EDUCATION AND TRAINING

Ph.D. in Astrophysics and dilute media

Université Grenoble Alpes [Oct 2013 – Oct 2016]

Ph.D. in Physics

Università degli Studi Roma Tre [Oct 2013 – Oct 2016]

Grenoble, France – Rome, Italy

Thesis: Constraining the high-energy emission sources in the environment of supermassive black holes

Link: <https://tel.archives-ouvertes.fr/tel-01589295/>

Joint Ph.D. at Université Grenoble Alpes, France (Doctorat en Astrophysique et milieux dilués) and Università degli Studi Roma Tre, Italy (Dottorato di ricerca in Fisica) financed by a Vinci scholarship of the French-Italian University (UIF/UFI).

Co-supervisors: P.-O. Petrucci, G. Matt

Visiting Student

Harvard-Smithsonian Center for Astrophysics [Jun 2013 – Sep 2013]

Boston, United States

Numerical simulations of accretion disc winds in active galactic nuclei

Supervisor: M. Elvis

Laurea Magistrale in Scienze Fisiche e Astrofisiche (Master's Degree in Physics and Astrophysics)

Università degli Studi di Firenze [Sep 2009 – Dec 2012]

Florence, Italy

Final grade: 110/110 cum laude

Thesis: Variability in the X-ray band of active galactic nuclei (Supervisor: G. Risaliti)

Laurea Triennale in Fisica e Tecnologie Avanzate (Bachelor's Degree in Physics)

Università degli Studi di Siena [Sep 2006 – Oct 2009]

Siena, Italy

Final grade: 110/110 cum laude

NETWORKS AND SCIENTIFIC COLLABORATIONS

Member of the CUIA Italy-Argentina project *Study of the formation and evolution of massive star binary systems in the Universe* [2024 – Current]

Coordinator: G. Iorio (Univ. Padova)

Link: https://ganegroup.github.io/workshop/Workshop_on_Massive_stars

Member of the project *SUBWAYS (Supermassive Black Holes Winds in the X-rays)* [2020 – Current]

Team leader: M. Brusa (Univ. Bologna)

Responsible of the analysis of NuSTAR data

3 papers published as co-author

Link: <https://marcellabrusa.wixsite.com/subways2019>

Member of the ISSI international team *Warm coronae in AGN: Observational evidence and physical understanding* [2020 – Current]

Co-chair: P.-O. Petrucci (IPAG), G. Matt (Univ. Roma Tre)

2 papers published as co-author

Link: <https://sites.google.com/view/issi-warmcorona/home>

Participant to the *IXPE Science Team* [2019 – Current]

Member of three Working Groups:

- Accreting neutron stars
- Radio-quiet AGN and Sgr A*
- Accreting stellar-mass black holes

2 papers published as first author, 2 as internal referee, 17 as co-author

1 invited review paper

Link: https://ixpe.msfc.nasa.gov/partners_sci_team.html

Member of the *Athena Science Study Team* [2019 – Current]

Science Working Group 2.4 The close environments of supermassive black holes

Link: <https://www.the-athena-x-ray-observatory.eu/community.html>

Member of the project *GRACE (Giant Radio Galaxies and their Duty Cycle)* [2016 – Current]

1 paper published as first author, 1 as second author, 4 as co-author

Link: <https://sites.google.com/inaf.it/grace/>

Member of the *NuSTAR Science Team* [2013 – Current]

1 paper published as first author, 1 as co-author

Member of the *INTEGRAL/IBIS* Survey Team [2016 – 2020]

1 paper published as first author, 1 as co-author

Member of the EU FP7-Space Research Project *StrongGravity* [2013 – 2017]

EU research project coordinated by the Astronomical Institute of the Czech Academy of Sciences

1 paper published as first author, 3 as co-author

Link: <http://stronggravity.eu/>

Member of the International Scientific Cooperation Project (PICS) *CHEESES* [2013 – 2016]

PICS CNRS-INAF n. 181542, CHEESES: Constraining the High Energy Emission Sources in the Environment of Supermassive black holes

co-PIs: P.-O. Petrucci (CNRS/IPAG), A. De Rosa (INAF/IAPS)

1 paper published as second author

Link:

https://adlibitum.oats.inaf.it/meetings/AGN11-Sept2014/Talks/De_Rosa_Alessandra.pdf

Participant to the ISSI international team *Deciphering AGN outflows:*

***Multiwavelength monitoring of NGC 5548* [2013 – 2016]**

Team leaders: M. Cappi (INAF/IASF), J. Kaastra (SRON)

1 paper published as first author, 6 as co-author

Link: <https://www.issibern.ch/teams/ngc5548/>

TECHNICAL/OBSERVING EXPERIENCE

XMM-Newton, NuSTAR, Swift, NICER, IXPE: successful proposals, reduction and analysis of data.

Chandra, Suzaku, INTEGRAL: reduction and analysis of data.

Granted observing time as Principal Investigator:

◦ X-ray spectropolarimetry of bright atoll sources [2024]

NuSTAR Cycle 10 proposal 10081 (110 ks)

◦ NuSTAR observation of Serpens X-1 [2024]

NuSTAR DDT obs.id 91001316002 (40 ks)

◦ X-ray polarimetry of bright atoll sources [2023]

IXPE GO-1, proposal 1050 (150 ks)

◦ Joint X-ray polarimetry and spectroscopy of weakly magnetised neutron star X-ray binaries [2021]

NuSTAR Cycle 8 proposal 8128 (50 ks)

◦ Joint NICER-IXPE observation of GS 1826-238 [2021]

NICER ToO 41893 (30 ks)

- **Joint NICER-IXPE observation of Cygnus X-2** [2021]
NICER ToO 42807 (20 ks)
- **Raising the luminosity bar: broad-band view of the most luminous unobscured quasar at $z < 0.1$** [2020]
NuSTAR Cycle 7 proposal 7217 (200 ks)
- **Towards a census of the energetics and duty cycle of giant radio galaxies** [2018]
Swift Cycle 15 proposal 1518099 (~60 ks)
- **XMM observation of Fermi J1544-0649** [2017]
XMM-Newton ToO 081121 (50 ks)
- **Swift monitoring of the radio-weak BL Lac candidate Fermi J1544-0649** [2017]
Swift ToO 10145 (~30 ks)
- **The multiwavelength monitoring of the broad-line radio galaxy 3C 382** [2015]
Very Long Baseline Array DDT proposal (9.5 h)
- **NuSTAR/XMM monitoring of the broad-line radio galaxy 3C 382** [2014]
NuSTAR Cycle 2, proposal 2023/79060 (100 ks)

Granted observing time as Co-Investigator:

- Advancements in the X-ray polarization studies of the coronal environment: the secrets of NGC 4151 [2024]
NuSTAR Cycle 10, proposal 10142 (100 ks) PI: V. E. Gianolli
- Deciphering the Comptonization properties of NGC 2110 through simultaneous X-ray spectro-polarimetry [2024]
NuSTAR Cycle 10, proposal 10247 (50 ks) PI: S. Chakraborty
- Follow-up of the first X-ray polarization measurement of the AGN corona: a new observation for NGC 4151 [2023]
IXPE GO-1, proposal 1169 (750 ks) PI: V. E. Gianolli
- Deciphering the Comptonization properties of low luminosity AGN through X-ray polarimetry [2023]
IXPE GO-1, proposal 1160 (600 ks) PI: S. Chakraborty
- Revealing the geometry of the hot corona in NGC 4151 [2022]
XMM-Newton Cycle 22, proposal 09211601 (100 ks) PI: V. E. Gianolli
- Joint INTEGRAL-IXPE observation of Cygnus X-2 [2021]
INTEGRAL ToO 1970006 (50 ks) PI: F. Capitanio
- The geometry of the hot corona in MCG-05-23-16 and IC 4329A [2020]
NuSTAR Cycle 7, proposal 7050 (160 ks) PI: A. Marinucci
- Hunting high-energy flares in radio-weak BL Lacs [2020]
INTEGRAL Cycle 19, proposal 1940001 (340 ks) PI: G. Bruni
- XMM/HST monitoring of the ultra soft Narrow Line Seyfert 1RX J1355.2+5612 [2020]
XMM-Newton Cycle 21, proposal 09033701 (140 ks) PI: S. Barnier
- The first X-ray polarimetry and spectroscopy observations of transient black hole X-ray binaries [2020]

- NICER Cycle 4 proposal 5001 (240 ks) PI: F. Capitanio
- H I absorption in extended radio galaxies [2017]
Giant Metrewave Radio Telescope Cycle 34, proposal 34_052 (16 h) PI: L. Bassani
 - NuSTAR/XMM monitoring of the extreme Narrow Line Seyfert 1 Mrk 359 [2017]
NuSTAR Cycle 4, proposal 4157/83055 (250 ks) PI: P.-O. Petrucci
 - The NuSTAR/XMM monitoring of the high accretion rate Seyfert 1 HE 1143-1810 [2016]
NuSTAR Cycle 3, proposal 3009/79558 (100 ks) PI: S. Bianchi
 - Constraining The X-Ray Emitting Mechanism In AGN Via Simultaneous Swift/NuSTAR Observations [2014]
NuSTAR Cycle 2, proposal 2099 (250 ks) PI: A. Tortosa

SERVICE TO THE COMMUNITY

Member of Time Allocation Committees:

- *Chandra*, Cycle 26 [2024]
- *INTEGRAL*, AO-19, AO-20 [2020 – 2022]

Journal referee for:

- *The Astrophysical Journal*
- *Monthly Notices of the Royal Astronomical Society*
- *Astronomy and Astrophysics*
- *Astrophysics and Space Science*

TEACHING AND ACADEMIC SUPPORT TO PHD AND MASTER'S STUDENTS

Co-supervision of PhD Students:

- Daniele Tagliacozzo, Roma Tre University, PhD in Physics, Cycle XXXVIII (supervisor: G. Matt): X-ray spectropolarimetric analysis of radio-quiet AGN [2022 – current]
- Andrea Gnarini, Roma Tre University, PhD in Physics, Cycle XXXVI (supervisor: G. Matt): X-ray spectropolarimetric analysis of neutron star X-ray binaries [2020 – 2023]

Co-supervision of Master's Students:

- Beatrice Vaia, Roma Tre University, Master's Degree in Physics (supervisor: G. Matt): Broad-band view of the most luminous unobscured quasar at $z < 0.1$ [2021 – 2022]
- Daniele Tagliacozzo, Roma Tre University, Master's Degree in Physics (supervisor: G. Matt): X-ray spectropolarimetric simulations of the Seyfert galaxy IC 4329A [2021 – 2022]

Scientific support and assistance to PhD Students:

- Vittoria Elvezia Gianolli, Université Grenoble Alpes and Roma Tre University, PhD in Physics, Cycle XXXVII (supervisors: P.-O. Petrucci, S. Bianchi): systematic study of ultra-fast outflows in active galactic nuclei [2021 – 2024]
- Maxime Parra, Université Grenoble Alpes and Roma Tre University, PhD in Physics, Cycle XXXVII (supervisors: P.-O. Petrucci, S. Bianchi): X-ray spectral analysis of Galactic black holes winds [2021 – 2024]
- Romana Mikusincova, Roma Tre University, PhD in Physics, Cycle XXXV (supervisor: G. Matt): X-ray spectral analysis of neutron star X-ray binaries [2022 – 2023]

Undergraduate teaching:

[2023 – 2024] Roma Tre University, Teaching assistant

- Physics I, B.Sc. in Mathematics, 30 hours (Prof. S. Mari)
Exercise sessions. Written exams preparation and correction.
- Physics II, B.Sc. in Mathematics, 18 hours (Prof. P. Gallo)
Exercise sessions. Written exams preparation and correction.
- Physics Laboratory II, B.Sc. in Physics, 24 hours (Prof. R. Di Nardo)
Laboratory sessions.

[2022 – 2023] Roma Tre University, Teaching assistant

- Physics I, B.Sc. in Mathematics, 30 hours (Prof. P. Gallo)
Exercise sessions. Written exams preparation and correction.
- Physics II, B.Sc. in Mathematics, 18 hours (Prof. W. Plastino)
Exercise sessions.
- Physics Laboratory II, B.Sc. in Physics, 24 hours (Prof. S. Mari)
Laboratory sessions.

PUBLICATIONS

July 2024:

108 publications, >2000 total citations, H-index=26 (source: NASA/ADS)

87 refereed articles; 15 as first author, 4 as second author

Link: https://ui.adsabs.harvard.edu/search/p_0&q=orcid%3A0000-0001-9442-7897

List of refereed articles:

1. **Ursini, F.**, Gnarini, A., Capitanio, F., Bobrikova, A., Cocchi, M., Di Marco, A., Fabiani, S., Farinelli, R., La Monaca, F., Rankin, J., Saade, M. L., Poutanen, J. (2024): The IXPE view of neutron star low-mass X-ray binaries. Review article to appear in a special edition of *Galaxies*.

2. Veledina, A., Muleri, F., Poutanen, J., Podgorný, J., Dovčiak, M., Capitanio, F., Churazov, E., De Rosa, A., Di Marco, A., Forsblom, S. V., Kaaret, P., Krawczynski, H., La Monaca, F., Loktev, V., Lutovinov, A. A., Molkov, S. V., Mushtukov, A. A., Ratheesh, A., Rodriguez Caverio, N., Steiner, J. F., Sunyaev, R. A., Tsygankov, S. S., Weisskopf, M. C., Zdziarski, A. A., Bianchi, S., Bright, J. S., Bursov, N., Costa, E., Egron, E., Garcia, J. A., Green, D. A., Gurwell, M., Ingram, A., Kajava, J. J. E., Kale, R., Kraus, A., Malyshev, D., Marin, F., Matt, G., McCollough, M., Mereminskiy, I. A., Nizhelsky, N., Piano, G., Pilia, M., Pittori, C., Rao, R., Righini, S., Soffitta, P., Shevchenko, A., Svoboda, J., Tombesi, F., Trushkin, S. A., Tsybulev, P., **Ursini, F.**, Wu, K., & IXPE Collaboration (2024): Cygnus X-3 revealed as a Galactic ultraluminous X-ray source by IXPE, *Nature Astronomy*, accepted.
<https://doi.org/10.1038/s41550-024-02294-9>
3. Ingram, A., Bollemeijer, N., Veledina, A., Dovčiak, M., Poutanen, J., Egron, E., Russell, T. D., Trushkin, S. A., Negro, M., Ratheesh, A., Capitanio, F., Connors, R., Neilsen, J., Kraus, A., Iacolina, M. N., Pellizzoni, A., Pilia, M., Carotenuto, F., Matt, G., Mastroserio, G., Kaaret, P., Bianchi, S., García, J. A., Bachetti, M., Wu, K., Costa, E., Ewing, M., Kravtsov, V., Krawczynski, H., Loktev, V., Marinucci, A., Marra, L., Mikušincová, R., Nathan, E., Parra, M., Petrucci, P.-O., Righini, S., Soffitta, P., Steiner, J. F., Svoboda, J., Tombesi, F., Tugliani, S., **Ursini, F.**, Yang, Y.-J., Zane, S., Zhang, W., & IXPE Collaboration (2024): Tracking the X-Ray Polarization of the Black Hole Transient Swift J1727.8–1613 during a State Transition, *The Astrophysical Journal*, 968, 76.
<https://doi.org/10.3847/1538-4357/ad3faf>
4. Vaia, B., **Ursini, F.**, Matt, G., Ballantyne, D. R., Bianchi, S., De Rosa, A., Middei, R., Petrucci, P. O., Piconcelli, E., & Tortosa, A. (2024): The origin of the soft excess in the luminous quasar HE 1029-1401, *Astronomy and Astrophysics*, accepted; arXiv:2405.13479.
<https://doi.org/10.48550/arXiv.2405.13479>
5. Ballantyne, D. R., Sudhakar, V., Fairfax, D., Bianchi, S., Czerny, B., De Rosa, A., De Marco, B., Middei, R., Palit, B., Petrucci, P.-O., Róžańska, A., & **Ursini, F.** (2024): Unveiling energy pathways in AGN accretion flows with the warm corona model for the soft excess, *Monthly Notices of the Royal Astronomical Society*, 530, 1603.
<https://doi.org/10.1093/mnras/stae944>
6. Fabiani, S., Capitanio, F., Iaria, R., Poutanen, J., Gnarini, A., **Ursini, F.**, Farinelli, R., Bobrikova, A., Steiner, J. F., Svoboda, J., Anitra, A., Baglio, M. C., Carotenuto, F., Del Santo, M., Ferrigno, C., Lewis, F., Russell, D. M., Russell, T. D., van den Eijnden, J., Cocchi, M., Di Marco, A., La Monaca, F., Liu, K., Rankin, J., Weisskopf, M. C., Xie, F., Bianchi, S., Burderi, L., Di Salvo, T., Egron, E., Illiano, G., Kaaret, P., Matt, G., Mikušincová, R., Muleri, F., Papitto, & IXPE Collaboration (2024): Discovery of a

variable energy-dependent X-ray polarization in the accreting neutron star GX 5-1, *Astronomy and Astrophysics*, 684, A137.
<https://doi.org/10.1051/0004-6361/202347374>

7. Marra, L., Brigitte, M., Rodriguez Cavero, N., Chun, S., Steiner, J. F., Dovčiak, M., Nowak, M., Bianchi, S., Capitanio, F., Ingram, A., Matt, G., Muleri, F., Podgorný, J., Poutanen, J., Svoboda, J., Taverna, R., **Ursini, F.**, Veledina, A., De Rosa, A., García, J. A., Lutovinov, A. A., Mereminskiy, I. A., Farinelli, R., Gunji, S., Kaaret, P., Kallman, T., Krawczynski, H., Kan, Y., Hu, K., Marinucci, A., Mastroserio, G., Mikušincová, R., Parra, M., Petrucci, P.-O., Ratheesh, A., Soffitta, P., Tombesi, F., Zane, S., & IXPE collaboration (2024): IXPE observation confirms a high spin in the accreting black hole 4U 1957+115, *Astronomy and Astrophysics*, 684, A95.
<https://doi.org/10.1051/0004-6361/202348277>
8. Gianolli, V. E., Bianchi, S., Petrucci, P.-O., Brusa, M., Chartas, G., Lanzuisi, G., Matzeu, G. A., Parra, M., **Ursini, F.**, Behar, E., Bischetti, M., Comastri, A., Costantini, E., Cresci, G., Dadina, M., De Marco, B., De Rosa, A., Fiore, F., Gaspari, M., Gilli, R., Giustini, M., Guainazzi, M., King, A. R., Kraemer, S., Kriss, G., Krongold, Y., La Franca, F., Longinotti, A. L., Luminari, A., Maiolino, R., Marconi, A., Mathur, S., Matt, G., Mehdipour, M., Merloni, A., Middei, R., Miniutti, G., Nardini, E., Panessa, F., Perna, M., Piconcelli, E., Ponti, G., Ricci, F., Serafinelli, R., Tombesi, F., Vignali, C., & Zappacosta, L. (2024): Supermassive Black Hole Winds in X-rays -- SUBWAYS. III. A population study on ultra-fast outflows, arXiv e-prints, arXiv:2403.09538.
<https://doi.org/10.48550/arXiv.2403.09538>
9. Marin, F., Marinucci, A., Laurenti, M., Kim, D. E., Barnouin, T., Di Marco, A., **Ursini, F.**, Bianchi, S., Ravi, S., Marshall, H. L., Matt, G., Chen, C.-T., Gianolli, V. E., Ingram, A., Maksym, W. P., Panagiotou, C., Podgorný, J., Puccetti, S., Ratheesh, A., Tombesi, F., & IXPE collaboration (2024): X-ray polarization measurement of the gold standard of radio-quiet active galactic nuclei : NGC 1068, arXiv e-prints, arXiv:2403.02061.
<https://doi.org/10.48550/arXiv.2403.02061>
10. Ratheesh, A., Dovčiak, M., Krawczynski, H., Podgorný, J., Marra, L., Veledina, A., Suleimanov, V. F., Rodriguez Cavero, N., Steiner, J. F., Svoboda, J., Marinucci, A., Bianchi, S., Negro, M., Matt, G., Tombesi, F., Poutanen, J., Ingram, A., Taverna, R., West, A., Karas, V., **Ursini, F.**, Soffitta, P., Capitanio, F., Viscolo, D., Manfreda, A., Muleri, F., Parra, M., Beheshtipour, B., Chun, S., Cibrario, N., Di Lalla, N., Fabiani, S., Hu, K., Kaaret, P., Loktev, V., Mikušincová, R., Mizuno, T., Omodei, N., Petrucci, P.-O., Puccetti, S., Rankin, J., Zane, S., Zhang, S., & IXPE collaboration (2024): X-Ray Polarization of the Black Hole X-Ray Binary 4U 1630-47 Challenges the Standard Thin Accretion Disk Scenario, *The Astrophysical Journal*, 964, 77.

<https://doi.org/10.3847/1538-4357/ad226e>

11. Saade, M. L., Kaaret, P., Gnarini, A., Poutanen, J., **Ursini, F.**, Bianchi, S., Bobrikova, A., La Monaca, F., Di Marco, A., Capitanio, F., Veledina, A., & IXPE collaboration (2024): X-Ray Polarimetry of the Dipping Accreting Neutron Star 4U 1624–49, *The Astrophysical Journal*, 963, 133.
<https://doi.org/10.3847/1538-4357/ad235a>
12. Bobrikova, A., Forsblom, S. V., Di Marco, A., La Monaca, F., Poutanen, J., Ng, M., Ravi, S., Loktev, V., Kajava, J. J. E., **Ursini, F.**, Veledina, A., Rogantini, D., Salmi, T., Bianchi, S., Capitanio, F., Done, C., Fabiani, S., Gnarini, A., Heyl, J., Kaaret, P., Matt, G., Muleri, F., Nitindala, A. P., Rankin, J., Weisskopf, M. C., & IXPE collaboration (2024): Discovery of a strong rotation of the X-ray polarization angle in the galactic burster GX 13+1, arXiv e-prints, arXiv:2401.13058.
<https://doi.org/10.48550/arXiv.2401.13058>
13. La Monaca, F., Di Marco, A., Poutanen, J., Bachetti, M., Motta, S. E., Papitto, A., Pilia, M., Xie, F., Bianchi, S., Bobrikova, A., Costa, E., Deng, W., Ge, M.-Y., Illiano, G., Jia, S.-M., Krawczynski, H., Lai, E. V., Liu, K., Mastroserio, G., Muleri, F., Rankin, J., Soffitta, P., Veledina, A., Ambrosino, F., Del Santo, M., Chen, W., Garcia, J. A., Kaaret, P., Russell, T. D., Wei, W.-H., Zhang, S.-N., Zuo, C., Arzoumanian, Z., Cocchi, M., Gnarini, A., Farinelli, R., Gendreau, K., **Ursini, F.**, Weisskopf, M. C., Zane, S., & IXPE Collaboration (2024): Highly Significant Detection of X-Ray Polarization from the Brightest Accreting Neutron Star Sco X-1, *The Astrophysical Journal*, 960, L11.
<https://doi.org/10.3847/2041-8213/ad132d>
14. Svoboda, J., Dovčiak, M., Steiner, J. F., Muleri, F., Ingram, A., Yilmaz, A., Rodriguez Caverio, N., Marra, L., Poutanen, J., Veledina, A., Mojaver, M. R., Bianchi, S., García, J. A., Kaaret, P., Krawczynski, H., Matt, G., Podgorný, J., Weisskopf, M. C., Kislak, F., Petrucci, P.-O., Brigitte, M., Bursa, M., Fabiani, S., Hu, K., Chun, S., Mastroserio, G., Mikušincová, R., Ratheesh, A., Romani, R. W., Soffitta, P., **Ursini, F.**, Zane, S., & IXPE collaboration (2024): First X-Ray Polarization Measurement Confirms the Low Black Hole Spin in LMC X-3, *The Astrophysical Journal*, 960, 3.
<https://doi.org/10.3847/1538-4357/ad0842>
15. Parra, M., Petrucci, P.-O., Bianchi, S., Gianolli, V. E., **Ursini, F.**, & Ponti, G. (2024): The current state of disk wind observations in BHLMXBs through X-ray absorption lines in the iron band, *Astronomy and Astrophysics*, 681, A49.
<https://doi.org/10.1051/0004-6361/202346920>
16. Serafinelli, R., Marinucci, A., De Rosa, A., Bianchi, S., Middei, R., Matt, G., Reeves, J. N., Braito, V., Tombesi, F., Gianolli, V. E., Ingram, A., Marin, F., Petrucci, P.-O.,

Tagliacozzo, D., & **Ursini, F.** (2023): A remarkably stable accretion disc in the Seyfert galaxy MCG-5-23-16, *Monthly Notices of the Royal Astronomical Society*, 526, 3540.
<https://doi.org/10.1093/mnras/stad2801>

17. Capitanio, F., Gnarini, A., Fabiani, S., **Ursini, F.**, Farinelli, R., Cocchi, M., Rodriguez Caverio, N., & Marra, L. (2023): Polarized Light from Accreting Low Mass X-Ray Binaries, *Astronomy Reports*, 67, S151.
<https://doi.org/10.1134/S1063772923140044>
18. Ingram, A., Bollemeijer, N., Veledina, A., Dovciak, M., Poutanen, J., Egron, E., Russell, T. D., Trushkin, S. A., Negro, M., Ratheesh, A., Capitanio, F., Connors, R., Neilsen, J., Kraus, A., Noemi Iacolina, M., Pellizzoni, A., Pilia, M., Carotenuto, F., Matt, G., Mastroserio, G., Kaaret, P., Bianchi, S., Garcia, J. A., Bachetti, M., Wu, K., Costa, E., Ewing, M., Kravtsov, V., Krawczynski, H., Loktev, V., Marinucci, A., Marra, L., Mikusincova, R., Nathan, E., Parra, M., Petrucci, P.-O., Righini, S., Soffitta, P., Steiner, J. F., Svoboda, J., Tombesi, F., Tugliani, S., **Ursini, F.**, Yang, Y.-J., Zane, S., Zhang, W., & IXPE collaboration (2023): Tracking the X-ray Polarization of the Black Hole Transient Swift J1727.8-1613 during a State Transition, arXiv e-prints, arXiv:2311.05497.
<https://doi.org/10.48550/arXiv.2311.05497>
19. Ingram, A., Ewing, M., Marinucci, A., Tagliacozzo, D., Rosario, D. J., Veledina, A., Kim, D. E., Marin, F., Bianchi, S., Poutanen, J., Matt, G., Marshall, H. L., **Ursini, F.**, De Rosa, A., Petrucci, P.-O., Madejski, G., Barnouin, T., Gesu, L. D., Dovčiak, M., Gianolli, V. E., Krawczynski, H., Loktev, V., Middei, R., Podgorny, J., Puccetti, S., Ratheesh, A., Soffitta, P., Tombesi, F., Ehlert, S. R., Massaro, F., & IXPE collaboration (2023): The X-ray polarization of the Seyfert 1 galaxy IC 4329A, *Monthly Notices of the Royal Astronomical Society*, 525, 5437.
<https://doi.org/10.1093/mnras/stad2625>
20. Tagliacozzo, D., Marinucci, A., **Ursini, F.**, Matt, G., Bianchi, S., Baldini, L., Barnouin, T., Caverio Rodriguez, N., De Rosa, A., Di Gesu, L., Dovčiak, M., Harper, D., Ingram, A., Karas, V., Kim, D. E., Krawczynski, H., Madejski, G., Marin, F., Middei, R., Marshall, H. L., Muleri, F., Panagiotou, C., Petrucci, P.-O., Podgorny, J., Poutanen, J., Puccetti, S., Soffitta, P., Tombesi, F., Veledina, A., Zhang, W., & IXPE collaboration (2023): The geometry of the hot corona in MCG-05-23-16 constrained by X-ray polarimetry, *Monthly Notices of the Royal Astronomical Society*, 525, 4735.
<https://doi.org/10.1093/mnras/stad2627>
21. Veledina, A., Muleri, F., Dovčiak, M., Poutanen, J., Ratheesh, A., Capitanio, F., Matt, G., Soffitta, P., Tennant, A. F., Negro, M., Kaaret, P., Costa, E., Ingram, A., Svoboda, J.,

Krawczynski, H., Bianchi, S., Steiner, J. F., García, J. A., Kravtsov, V., Nitindala, A. P., Ewing, M., Mastroserio, G., Marinucci, A., **Ursini, F.**, Tombesi, F., Tsygankov, S. S., Yang, Y.-J., Weisskopf, M. C., Trushkin, S. A., Egron, E., Iacolina, M. N., Pilia, M., Marra, L., Mikušincová, R., Nathan, E., Parra, M., Petrucci, P.-O., Podgorný, J., Tugliani, S., Zane, S., Zhang, W., & IXPE collaboration (2023): Discovery of X-Ray Polarization from the Black Hole Transient Swift J1727.8-1613, *The Astrophysical Journal*, 958, L16.

<https://doi.org/10.3847/2041-8213/ad0781>

22. Rodriguez Caverio, N., Marra, L., Krawczynski, H., Dovčiak, M., Bianchi, S., Steiner, J. F., Svoboda, J., Capitanio, F., Matt, G., Negro, M., Ingram, A., Veledina, A., Taverna, R., Karas, V., **Ursini, F.**, Podgorný, J., Ratheesh, A., Suleimanov, V., Mikušincová, R., Zane, S., Kaaret, P., Muleri, F., Poutanen, J., Malacaria, C., Petrucci, P.-O., Gau, E., Hu, K., Chun, S., & IXPE collaboration (2023): The First X-Ray Polarization Observation of the Black Hole X-Ray Binary 4U 1630-47 in the Steep Power-law State, *The Astrophysical Journal*, 958, L8.

<https://doi.org/10.3847/2041-8213/acfd2c>

23. Fabiani, S., Capitanio, F., Iaria, R., Poutanen, J., Gnarini, A., **Ursini, F.**, Farinelli, R., Bobrikova, A., Steiner, J. F., Svoboda, J., Anitra, A., Baglio, M. C., Carotenuto, F., Del Santo, M., Ferrigno, C., Lewis, F., Russell, D. M., Russell, T. D., van den Eijnden, J., Cocchi, M., Di Marco, A., La Monaca, F., Liu, K., Rankin, J., Weisskopf, M. C., Xie, F., Bianchi, S., Burderi, L., Di Salvo, T., Egron, E., Illiano, G., Kaaret, P., Matt, G., Mikušincová, R., Muleri, F., Papitto, A., & IXPE collaboration (2023): Discovery of a variable energy-dependent X-ray polarization in the accreting neutron star GX 5-1, arXiv e-prints, arXiv:2310.06788.

<https://doi.org/10.48550/arXiv.2310.06788>

24. Gianolli, V. E., Kim, D. E., Bianchi, S., Agís-González, B., Madejski, G., Marin, F., Marinucci, A., Matt, G., Middei, R., Petrucci, P.-O., Soffitta, P., Tagliacozzo, D., Tombesi, F., **Ursini, F.**, Barnouin, T., De Rosa, A., Di Gesu, L., Ingram, A., Loktev, V., Panagiotou, C., Podgorný, J., Poutanen, J., Puccetti, S., Ratheesh, A., Veledina, A., Zhang, W., & IXPE collaboration (2023): Uncovering the geometry of the hot X-ray corona in the Seyfert galaxy NGC 4151 with IXPE, *Monthly Notices of the Royal Astronomical Society*, 523, 4468.

<https://doi.org/10.1093/mnras/stad1697>

25. Di Marco, A., La Monaca, F., Poutanen, J., Russell, T. D., Anitra, A., Farinelli, R., Mastroserio, G., Muleri, F., Xie, F., Bachetti, M., Burderi, L., Carotenuto, F., Del Santo, M., Di Salvo, T., Dovčiak, M., Gnarini, A., Iaria, R., Kajava, J. J. E., Liu, K., Middei, R., O'Dell, S. L., Pilia, M., Rankin, J., Sanna, A., Eijnden, J. van den, Weisskopf, M. C., Bobrikova, A., Capitanio, F., Costa, E., Kaaret, P., Marino, A., Soffitta, P., **Ursini, F.**,

Ambrosino, F., Cocchi, M., Fabiani, S., Marshall, H. L., Matt, G., Motta, S. E., Papitto, A., Stella, L., Tarana, A., Zane, S., & IXPE Collaboration (2023): First Detection of X-Ray Polarization from the Accreting Neutron Star 4U 1820-303, *The Astrophysical Journal*, 953, L22.

<https://doi.org/10.3847/2041-8213/acec6e>

26. **Ursini, F.**, Farinelli, R., Gnarini, A., Poutanen, J., Bianchi, S., Capitanio, F., Di Marco, A., Fabiani, S., La Monaca, F., Malacaria, C., Matt, G., Mikušincová, R., Cocchi, M., Kaaret, P., Kajava, J. J. E., Pilia, M., Zhang, W., & IXPE collaboration (2023): X-ray polarimetry and spectroscopy of the neutron star low-mass X-ray binary GX 9+9: An in-depth study with IXPE and NuSTAR, *Astronomy and Astrophysics*, 676, A20.
<https://doi.org/10.1051/0004-6361/202346541>
27. Tsygankov, S. S., Doroshenko, V., Mushtukov, A. A., Poutanen, J., Di Marco, A., Heyl, J., La Monaca, F., Forsblom, S. V., Malacaria, C., Marshall, H. L., Suleimanov, V. F., Svoboda, J., Taverna, R., **Ursini, F.**, & IXPE collaboration (2023): X-ray pulsar GRO J1008-57 as an orthogonal rotator, *Astronomy and Astrophysics*, 675, A48.
<https://doi.org/10.1051/0004-6361/202346134>
28. Cocchi, M., Gnarini, A., Fabiani, S., **Ursini, F.**, Poutanen, J., Capitanio, F., Bobrikova, A., Farinelli, R., Paizis, A., Sidoli, L., Veledina, A., Bianchi, S., Di Marco, A., Ingram, A., Kajava, J. J. E., La Monaca, F., Matt, G., Malacaria, C., Mikušincová, R., Rankin, J., Zane, S., & IXPE collaboration (2023): Discovery of strongly variable X-ray polarization in the neutron star low-mass X-ray binary transient XTE J1701-462, *Astronomy and Astrophysics*, 674, L10.
<https://doi.org/10.1051/0004-6361/202346275>
29. Middei, R., Petrucci, P.-O., Bianchi, S., **Ursini, F.**, Matzeu, G. A., Vagnetti, F., Tortosa, A., Marinucci, A., Matt, G., Piconcelli, E., De Rosa, A., De Marco, B., Reeves, J., Perri, M., Guainazzi, M., Cappi, M., & Done, C. (2023): Tracking the spectral properties of ESO 511-G030 across different epochs, *Astronomy and Astrophysics*, 672, A101.
<https://doi.org/10.1051/0004-6361/202244022>
30. Veledina, A., Muleri, F., Poutanen, J., Podgorný, J., Dovčiak, M., Capitanio, F., Churazov, E., De Rosa, A., Di Marco, A., Forsblom, S., Kaaret, P., Krawczynski, H., La Monaca, F., Loktev, V., Lutovinov, A. A., Molkov, S. V., Mushtukov, A. A., Ratheesh, A., Rodriguez Cervero, N., Steiner, J. F., Sunyaev, R. A., Tsygankov, S. S., Zdziarski, A. A., Bianchi, S., Bright, J. S., Bursov, N., Costa, E., Egron, E., Garcia, J. A., Green, D. A., Gurwell, M., Ingram, A., Kajava, J. J. E., Kale, R., Kraus, A., Malyshev, D., Marin, F., Matt, G., McCollough, M., Mereminskiy, I. A., Nizhelsky, N., Piano, G., Pilia, M., Pittori, C., Rao, R., Righini, S., Soffitta, P., Shevchenko, A., Svoboda, J., Tombesi, F., Trushkin, S., Tsybulev, P., **Ursini, F.**, Weisskopf, M. C., Wu, K., & IXPE collaboration (2023):

Astronomical puzzle Cyg X-3 is a hidden Galactic ultraluminous X-ray source, arXiv e-prints, arXiv:2303.01174.

<https://doi.org/10.48550/arXiv.2303.01174>

31. Farinelli, R., Fabiani, S., Poutanen, J., **Ursini, F.**, Ferrigno, C., Bianchi, S., Cocchi, M., Capitanio, F., De Rosa, A., Gnarini, A., Kislak, F., Matt, G., Mikusincova, R., Muleri, F., & IXPE collaboration (2023): Accretion geometry of the neutron star low mass X-ray binary Cyg X-2 from X-ray polarization measurements, *Monthly Notices of the Royal Astronomical Society*, 519, 3681.
<https://doi.org/10.1093/mnras/stac3726>
32. **Ursini, F.**, Marinucci, A., Matt, G., Bianchi, S., Marin, F., Marshall, H. L., Middei, R., Poutanen, J., Rogantini, D., De Rosa, A., Di Gesu, L., García, J. A., Ingram, A., Kim, D. E., Krawczynski, H., Puccetti, S., Soffitta, P., Svoboda, J., Tombesi, F., Weisskopf, M. C., Barnouin, T., Perri, M., Podgorny, J., Ratheesh, A., Zaino, A., & IXPE collaboration (2023): Mapping the circumnuclear regions of the Circinus galaxy with the Imaging X-ray Polarimetry Explorer, *Monthly Notices of the Royal Astronomical Society*, 519, 50.
<https://doi.org/10.1093/mnras/stac3189>
33. Capitanio, F., Fabiani, S., Gnarini, A., **Ursini, F.**, Ferrigno, C., Matt, G., Poutanen, J., Cocchi, M., Mikusincova, R., Farinelli, R., Bianchi, S., Kajava, J. J. E., Muleri, F., Sanchez-Fernandez, C., Soffitta, P., Wu, K., & IXPE collaboration (2023): Polarization Properties of the Weakly Magnetized Neutron Star X-Ray Binary GS 1826-238 in the High Soft State, *The Astrophysical Journal*, 943, 129.
<https://doi.org/10.3847/1538-4357/acae88>
34. Mehdipour, M., Kriss, G. A., Brusa, M., Matzeu, G. A., Gaspari, M., Kraemer, S. B., Mathur, S., Behar, E., Bianchi, S., Cappi, M., Chartas, G., Costantini, E., Cresci, G., Dadina, M., De Marco, B., De Rosa, A., Dunn, J. P., Gianolli, V. E., Giustini, M., Kaastra, J. S., King, A. R., Krongold, Y., La Franca, F., Lanzuisi, G., Longinotti, A. L., Luminari, A., Middei, R., Miniutti, G., Nardini, E., Perna, M., Petrucci, P.-O., Piconcelli, E., Ponti, G., Ricci, F., Tombesi, F., **Ursini, F.**, Vignali, C., & Zappacosta, L. (2023): Supermassive Black Hole Winds in X-rays: SUBWAYS. II. HST UV spectroscopy of winds at intermediate redshifts, *Astronomy and Astrophysics*, 670, A183.
<https://doi.org/10.1051/0004-6361/202245047>
35. Matzeu, G. A., Brusa, M., Lanzuisi, G., Dadina, M., Bianchi, S., Kriss, G., Mehdipour, M., Nardini, E., Chartas, G., Middei, R., Piconcelli, E., Gianolli, V., Comastri, A., Longinotti, A. L., Krongold, Y., Ricci, F., Petrucci, P. O., Tombesi, F., Luminari, A., Zappacosta, L., Miniutti, G., Gaspari, M., Behar, E., Bischetti, M., Mathur, S., Perna, M., Giustini, M., Grandi, P., Torresi, E., Vignali, C., Bruni, G., Cappi, M., Costantini, E., Cresci, G., De

- Marco, B., De Rosa, A., Gilli, R., Guainazzi, M., Kaastra, J., Kraemer, S., La Franca, F., Marconi, A., Panessa, F., Ponti, G., Proga, D., **Ursini, F.**, Baldini, P., Fiore, F., King, A. R., Maiolino, R., Matt, G., & Merloni, A. (2023): Supermassive Black Hole Winds in X-rays: SUBWAYS. I. Ultra-fast outflows in quasars beyond the local Universe, *Astronomy and Astrophysics*, 670, A182.
<https://doi.org/10.1051/0004-6361/202245036>
36. Pian, E., Anghinolfi, M., Ciroi, S., Panessa, F., Raiteri, C. M., Vercellone, S., Bassani, L., Bazzano, A., Berton, M., Bodo, G., Bruni, G., Calcidese, P., Capetti, A., Carnerero, M. I., Christille, J. M., Gardini, A., Ghisellini, G., Kulikovskiy, V., Malizia, A., Molina, M., Palazzi, E., Rafanelli, P., Righi, C., Rossi, P., Sanguineti, M., Tavecchio, F., Ubertini, P., **Ursini, F.**, Villata, M., & Zanni, C. (2022): Probing the physics of compact extragalactic sources over multiple scales, *Memorie della Società Astronomica Italiana*, 93, 88.
https://doi.org/10.36116/MEMSAIT_93N2_3.2022.11
37. Marinucci, A., Muleri, F., Dovciak, M., Bianchi, S., Marin, F., Matt, G., **Ursini, F.**, Middei, R., Marshall, H. L., Baldini, L., Barnouin, T., Rodriguez, N. C., De Rosa, A., Di Gesu, L., Harper, D., Ingram, A., Karas, V., Krawczynski, H., Madejski, G., Panagiotou, C., Petrucci, P. O., Podgorny, J., Puccetti, S., Tombesi, F., Veledina, A., Zhang, W., & IXPE collaboration (2022): Polarization constraints on the X-ray corona in Seyfert Galaxies: MCG-05-23-16, *Monthly Notices of the Royal Astronomical Society*, 516, 5907.
<https://doi.org/10.1093/mnras/stac2634>
38. Zhang, W., Dovčiak, M., Bursa, M., Karas, V., Matt, G., & **Ursini, F.** (2022): Investigating the X-ray polarization of lamp-post coronae in BHXRBs, *Monthly Notices of the Royal Astronomical Society*, 515, 2882.
<https://doi.org/10.1093/mnras/stac1937>
39. Xiang, X., Ballantyne, D. R., Bianchi, S., De Rosa, A., Matt, G., Middei, R., Petrucci, P.-O., Róžańska, A., & **Ursini, F.** (2022): REXCOR: a model of the X-ray spectrum of active galactic nuclei that combines ionized reflection and a warm corona, *Monthly Notices of the Royal Astronomical Society*, 515, 353.
<https://doi.org/10.1093/mnras/stac1646>
40. Gu, L., Mao, J., Kaastra, J. S., Mehdipour, M., Pinto, C., Grafton-Waters, S., Bianchi, S., Landt, H., Branduardi-Raymont, G., Costantini, E., Ebrero, J., Petrucci, P.-O., Behar, E., di Gesu, L., De Marco, B., Matt, G., Mitchell, J. A. J., Peretz, U., **Ursini, F.**, & Ward, M. (2022): Detection of an unidentified soft X-ray emission feature in NGC 5548, *Astronomy and Astrophysics*, 665, A93.
<https://doi.org/10.1051/0004-6361/202244075>

41. Gnarini, A., **Ursini, F.**, Matt, G., Bianchi, S., Capitanio, F., Cocchi, M., Farinelli, R., & Zhang, W. (2022): Polarization properties of weakly magnetized neutron stars in low-mass X-ray binaries, *Monthly Notices of the Royal Astronomical Society*, 514, 2561.
<https://doi.org/10.1093/mnras/stac1523>
42. **Ursini, F.**, Matt, G., Bianchi, S., Marinucci, A., Dovčiak, M., & Zhang, W. (2022): Prospects for differentiating extended coronal geometries in AGNs with the IXPE mission, *Monthly Notices of the Royal Astronomical Society*, 510, 3674.
<https://doi.org/10.1093/mnras/stab3745>
43. Mehdipour, M., Kriss, G. A., Kaastra, J. S., Wang, Y., Mao, J., Costantini, E., Arav, N., Behar, E., Bianchi, S., Branduardi-Raymont, G., Brotherton, M., Cappi, M., De Marco, B., Di Gesu, L., Ebrero, J., Grafton-Waters, S., Kaspi, S., Matt, G., Paltani, S., Petrucci, P.-O., Pinto, C., Ponti, G., **Ursini, F.**, & Walton, D. J. (2021): Transient obscuration event captured in NGC 3227. I. Continuum model for the broadband spectral energy distribution, *Astronomy and Astrophysics*, 652, A150.
<https://doi.org/10.1051/0004-6361/202141324>
44. Bruni, G., Brienza, M., Panessa, F., Bassani, L., Dallacasa, D., Venturi, T., Baldi, R. D., Botteon, A., Drabent, A., Malizia, A., Massaro, F., Röttgering, H. J. A., Ubertini, P., **Ursini, F.**, & van Weeren, R. J. (2021): Hard X-ray selected giant radio galaxies - III. The LOFAR view, *Monthly Notices of the Royal Astronomical Society*, 503, 4681.
<https://doi.org/10.1093/mnras/stab623>
45. Bassani, L., **Ursini, F.**, Malizia, A., Bruni, G., Panessa, F., Masetti, N., Saviane, I., Monaco, L., Venturi, T., Dallacasa, D., Bazzano, A., & Ubertini, P. (2021): Soft gamma-ray selected giant radio galaxies: an update, *Monthly Notices of the Royal Astronomical Society*, 500, 3111.
<https://doi.org/10.1093/mnras/staa3212>
46. **Ursini, F.**, Dovčiak, M., Zhang, W., Matt, G., Petrucci, P.-O., & Done, C. (2020): Estimating the size of X-ray lamppost coronae in active galactic nuclei, *Astronomy and Astrophysics*, 644, A132.
<https://doi.org/10.1051/0004-6361/202039158>
47. Middei, R., Petrucci, P.-O., Bianchi, S., **Ursini, F.**, Cappi, M., Clavel, M., De Rosa, A., Marinucci, A., Matt, G., & Tortosa, A. (2020): The soft excess of the NLS1 galaxy Mrk 359 studied with an XMM-Newton-NuSTAR monitoring campaign, *Astronomy and Astrophysics*, 640, A99.
<https://doi.org/10.1051/0004-6361/202038112>

48. Bruni, G., Panessa, F., Bassani, L., Dallacasa, D., Venturi, T., Saripalli, L., Brienza, M., Hernández-García, L., Chiaraluce, E., **Ursini, F.**, Bazzano, A., Malizia, A., & Ubertini, P. (2020): Hard X-ray selected giant radio galaxies - II. Morphological evidence of restarted radio activity, *Monthly Notices of the Royal Astronomical Society*, 494, 902.
<https://doi.org/10.1093/mnras/staa735>
49. Bruni, G., **Ursini, F.**, Panessa, F., Bassani, L., Bazzano, A., Bird, A. J., Chiaraluce, E., Dallacasa, D., Fiocchi, M., Giroletti, M., Hernández-García, L., Malizia, A., Molina, M., Saripalli, L., Ubertini, P., & Venturi, T. (2020): Probing restarting activity in hard X-ray selected giant radio galaxies, *Proceedings of the IAU General Assembly*, 66.
<https://doi.org/10.1017/S1743921319003478>
50. Middei, R., Tombesi, F., Vagnetti, F., Serafinelli, R., Bianchi, S., Miniutti, G., Marinucci, A., Matzeu, G. A., Petrucci, P.-O., **Ursini, F.**, & Zaino, A. (2020): A broadband X-ray view of the NLSy1 1E 0754.6+3928, *Astronomy and Astrophysics*, 635, A18.
<https://doi.org/10.1051/0004-6361/201936701>
51. **Ursini, F.**, Petrucci, P.-O., Bianchi, S., Matt, G., Middei, R., Marcel, G., Ferreira, J., Cappi, M., De Marco, B., De Rosa, A., Malzac, J., Marinucci, A., Ponti, G., & Tortosa, A. (2020): NuSTAR/XMM-Newton monitoring of the Seyfert 1 galaxy HE 1143-1810. Testing the two-corona scenario, *Astronomy and Astrophysics*, 634, A92.
<https://doi.org/10.1051/0004-6361/201936486>
52. Petrucci, P.-O., Gronkiewicz, D., Rozanska, A., Belmont, R., Bianchi, S., Czerny, B., Matt, G., Malzac, J., Middei, R., De Rosa, A., **Ursini, F.**, & Cappi, M. (2020): Radiation spectra of warm and optically thick coronae in AGNs, *Astronomy and Astrophysics*, 634, A85.
<https://doi.org/10.1051/0004-6361/201937011>
53. Hernández-García, L., Panessa, F., Bassani, L., Bruni, G., **Ursini, F.**, Chavushyan, V., González-Martín, O., Cazzoli, S., Jiménez-Andrade, E. F., Arévalo, P., Díaz, Y., Bazzano, A., & Ubertini, P. (2019): A young and obscured AGN embedded in the giant radio galaxy Mrk 1498, *Monthly Notices of the Royal Astronomical Society*, 489, 4049.
<https://doi.org/10.1093/mnras/stz2265>
54. **Ursini, F.**, Bassani, L., Malizia, A., Bazzano, A., Bird, A. J., Stephen, J. B., & Ubertini, P. (2019): The coronal temperature of NGC 4388 and NGC 2110 measured with INTEGRAL, *Astronomy and Astrophysics*, 629, A54.
<https://doi.org/10.1051/0004-6361/201936273>

55. Molina, M., Malizia, A., Bassani, L., **Ursini, F.**, Bazzano, A., & Ubertini, P. (2019): Swift/XRT-NuSTAR spectra of type 1 AGN: confirming INTEGRAL results on the high-energy cut-off, *Monthly Notices of the Royal Astronomical Society*, 484, 2735.
<https://doi.org/10.1093/mnras/stz156>
56. Bruni, G., Panessa, F., Bassani, L., Chiaraluce, E., Kraus, A., Dallacasa, D., Bazzano, A., Hernández-García, L., Malizia, A., Ubertini, P., **Ursini, F.**, & Venturi, T. (2019): A Discovery of Young Radio Sources in the Cores of Giant Radio Galaxies Selected at Hard X-Rays, *The Astrophysical Journal*, 875, 88.
<https://doi.org/10.3847/1538-4357/ab1006>
57. Middei, R., Bianchi, S., Petrucci, P.-O., **Ursini, F.**, Cappi, M., De Marco, B., De Rosa, A., Malzac, J., Marinucci, A., Matt, G., Ponti, G., & Tortosa, A. (2019): High-energy monitoring of NGC 4593 II. Broad-band spectral analysis: testing the two-corona model, *Monthly Notices of the Royal Astronomical Society*, 483, 4695.
<https://doi.org/10.1093/mnras/sty3379>
58. **Ursini, F.**, Bassani, L., Panessa, F., Pian, E., Bruni, G., Bazzano, A., Masetti, N., Sokolovsky, K., & Ubertini, P. (2019): An XMM-Newton look at the strongly variable radio-weak BL Lac Fermi J1544-0639, *Astronomy and Astrophysics*, 622, A116.
<https://doi.org/10.1051/0004-6361/201834662>
59. **Ursini, F.**, Bassani, L., Panessa, F., Bruni, G., Bazzano, A., Bird, A. J., Malizia, A., & Ubertini, P. (2019): High-energy view of hard X-ray selected radio galaxies, *Memorie della Società Astronomica Italiana*, 90, 170.
<http://sait.oat.ts.astro.it/MmSAI/90/PDF/170.pdf>
60. Kriss, G. A., Mehdipour, M., Kaastra, J. S., Rau, A., Bodensteiner, J., Plesha, R., Arav, N., Behar, E., Bianchi, S., Branduardi-Raymont, G., Cappi, M., Costantini, E., De Marco, B., Di Gesu, L., Ebrero, J., Kaspi, S., Mao, J., Middei, R., Miller, T., Paltani, S., Peretz, U., Peterson, B. M., Petrucci, P.-O., Ponti, G., **Ursini, F.**, Walton, D. J., & Xu, X. (2019): HST/COS observations of the newly discovered obscuring outflow in NGC 3783, *Astronomy and Astrophysics*, 621, A12.
<https://doi.org/10.1051/0004-6361/201834326>
61. **Ursini, F.**, Bassani, L., Panessa, F., Bird, A. J., Bruni, G., Fiocchi, M., Malizia, A., Saripalli, L., & Ubertini, P. (2018): Hard X-ray-selected giant radio galaxies - I. The X-ray properties and radio connection, *Monthly Notices of the Royal Astronomical Society*, 481, 4250.
<https://doi.org/10.1093/mnras/sty2547>

62. Middei, R., Vagnetti, F., Tombesi, F., Bianchi, S., Marinucci, A., **Ursini, F.**, & Tortosa, A. (2018): NuSTAR view of the Seyfert galaxy HE 0436-4717, *Astronomy and Astrophysics*, 618, A167.
<https://doi.org/10.1051/0004-6361/201833598>
63. **Ursini, F.**, Petrucci, P.-O., Matt, G., Bianchi, S., Cappi, M., Dadina, M., Grandi, P., Torresi, E., Ballantyne, D. R., De Marco, B., De Rosa, A., Giroletti, M., Malzac, J., Marinucci, A., Middei, R., Ponti, G., & Tortosa, A. (2018): Radio/X-ray monitoring of the broad-line radio galaxy 3C 382. High-energy view with XMM-Newton and NuSTAR, *Monthly Notices of the Royal Astronomical Society*, 478, 2663.
<https://doi.org/10.1093/mnras/sty1258>
64. Middei, R., Bianchi, S., Cappi, M., Petrucci, P.-O., **Ursini, F.**, Arav, N., Behar, E., Branduardi-Raymont, G., Costantini, E., De Marco, B., Di Gesu, L., Ebrero, J., Kaastra, J., Kaspi, S., Kriss, G. A., Mao, J., Mehdipour, M., Paltani, S., Peretz, U., & Ponti, G. (2018): Multi-wavelength campaign on NCG 7469. IV. The broad-band X-ray spectrum, *Astronomy and Astrophysics*, 615, A163.
<https://doi.org/10.1051/0004-6361/201832726>
65. Mehdipour, M., Kaastra, J. S., Costantini, E., Behar, E., Kriss, G. A., Bianchi, S., Branduardi-Raymont, G., Cappi, M., Ebrero, J., Di Gesu, L., Kaspi, S., Mao, J., De Marco, B., Middei, R., Peretz, U., Petrucci, P.-O., Ponti, G., & **Ursini, F.** (2018): Multi-wavelength campaign on NGC 7469. III. Spectral energy distribution and the AGN wind photoionisation modelling, plus detection of diffuse X-rays from the starburst with Chandra HETGS, *Astronomy and Astrophysics*, 615, A72.
<https://doi.org/10.1051/0004-6361/201832604>
66. **Ursini, F.**, Bassani, L., Panessa, F., Bazzano, A., Bird, A. J., Malizia, A., & Ubertini, P. (2018): Where are Compton-thick radio galaxies? A hard X-ray view of three candidates, *Monthly Notices of the Royal Astronomical Society*, 474, 5684.
<https://doi.org/10.1093/mnras/stx3159>
67. Petrucci, P.-O., **Ursini, F.**, De Rosa, A., Bianchi, S., Cappi, M., Matt, G., Dadina, M., & Malzac, J. (2018): Testing warm Comptonization models for the origin of the soft X-ray excess in AGNs, *Astronomy and Astrophysics*, 611, A59.
<https://doi.org/10.1051/0004-6361/201731580>
68. Tortosa, A., Bianchi, S., Marinucci, A., Matt, G., Middei, R., Piconcelli, E., Brenneman, L. W., Cappi, M., Dadina, M., De Rosa, A., Petrucci, P. O., **Ursini, F.**, & Walton, D. J. (2018): NuSTAR spectral analysis of two bright Seyfert 1 galaxies: MCG +8-11-11 and NGC 6814, *Monthly Notices of the Royal Astronomical Society*, 473, 3104.

<https://doi.org/10.1093/mnras/stx2457>

69. Porquet, D., Reeves, J. N., Matt, G., Marinucci, A., Nardini, E., Baito, V., Lobban, A., Ballantyne, D. R., Boggs, S. E., Christensen, F. E., Dauser, T., Farrah, D., Garcia, J., Hailey, C. J., Harrison, F., Stern, D., Tortosa, A., **Ursini, F.**, & Zhang, W. W. (2018): A deep X-ray view of the bare AGN Ark 120. IV. XMM-Newton and NuSTAR spectra dominated by two temperature (warm, hot) Comptonization processes, *Astronomy and Astrophysics*, 609, A42.
<https://doi.org/10.1051/0004-6361/201731290>
70. Peretz, U., Behar, E., Kriss, G. A., Kaastra, J., Arav, N., Bianchi, S., Branduardi-Raymont, G., Cappi, M., Costantini, E., De Marco, B., Di Gesu, L., Ebrero, J., Kaspi, S., Mehdipour, M., Middei, R., Paltani, S., Petrucci, P. O., Ponti, G., & **Ursini, F.** (2018): Multi-wavelength campaign on NGC 7469. II. Column densities and variability in the X-ray spectrum, *Astronomy and Astrophysics*, 609, A35.
<https://doi.org/10.1051/0004-6361/201731655>
71. De Marco, B., Ponti, G., Petrucci, P. O., Clavel, M., Corbel, S., Belmont, R., Chakravorty, S., Coriat, M., Drappeau, S., Ferreira, J., Henri, G., Malzac, J., Rodriguez, J., Tomsick, J. A., **Ursini, F.**, & Zdziarski, A. A. (2017): Evolution of the reverberation lag in GX 339-4 at the end of an outburst, *Monthly Notices of the Royal Astronomical Society*, 471, 1475.
<https://doi.org/10.1093/mnras/stx1649>
72. Mehdipour, M., Kaastra, J. S., Kriss, G. A., Arav, N., Behar, E., Bianchi, S., Branduardi-Raymont, G., Cappi, M., Costantini, E., Ebrero, J., Di Gesu, L., Kaspi, S., Mao, J., De Marco, B., Matt, G., Paltani, S., Peretz, U., Peterson, B. M., Petrucci, P.-O., Pinto, C., Ponti, G., **Ursini, F.**, de Vries, C. P., & Walton, D. J. (2017): Chasing obscuration in type-I AGN: discovery of an eclipsing clumpy wind at the outer broad-line region of NGC 3783, *Astronomy and Astrophysics*, 607, A28.
<https://doi.org/10.1051/0004-6361/201731175>
73. Behar, E., Peretz, U., Kriss, G. A., Kaastra, J., Arav, N., Bianchi, S., Branduardi-Raymont, G., Cappi, M., Costantini, E., De Marco, B., Di Gesu, L., Ebrero, J., Kaspi, S., Mehdipour, M., Paltani, S., Petrucci, P.-O., Ponti, G., & **Ursini, F.** (2017): Multi-wavelength campaign on NGC 7469. I. The rich 640 ks RGS spectrum, *Astronomy and Astrophysics*, 601, A17.
<https://doi.org/10.1051/0004-6361/201629943>
74. Tortosa, A., Marinucci, A., Matt, G., Bianchi, S., La Franca, F., Ballantyne, D. R., Boorman, P. G., Fabian, A. C., Farrah, D., Fuerst, F., Gandhi, P., Harrison, F. A., Koss, M. J., Ricci, C., Stern, D., **Ursini, F.**, & Walton, D. J. (2017): Broad-band X-ray

spectral analysis of the Seyfert 1 galaxy GRS 1734-292, *Monthly Notices of the Royal Astronomical Society*, 466, 4193.
<https://doi.org/10.1093/mnras/stw3301>

75. Middei, R., Vagnetti, F., Bianchi, S., La Franca, F., Paolillo, M., & **Ursini, F.** (2017): A long-term study of AGN X-ray variability . Structure function analysis on a ROSAT-XMM quasar sample, *Astronomy and Astrophysics*, 599, A82.
<https://doi.org/10.1051/0004-6361/201629940>
76. **Ursini, F.**, Petrucci, P.-O., Matt, G., Bianchi, S., Cappi, M., De Marco, B., De Rosa, A., Malzac, J., Marinucci, A., Ponti, G., & Tortosa, A. (2016): High-energy monitoring of NGC 4593 with XMM-Newton and NuSTAR. X-ray spectral analysis, *Monthly Notices of the Royal Astronomical Society*, 463, 382.
<https://doi.org/10.1093/mnras/stw2022>
77. Soffitta, P., et al. (2016): XIPE: the x-ray imaging polarimetry explorer, *Space Telescopes and Instrumentation 2016: Ultraviolet to Gamma Ray*, 9905, 990515.
<https://doi.org/10.1117/12.2233046>
78. Cappi, M., De Marco, B., Ponti, G., **Ursini, F.**, Petrucci, P.-O., Bianchi, S., Kaastra, J. S., Kriss, G. A., Mehdipour, M., Whewell, M., Arav, N., Behar, E., Boissay, R., Branduardi-Raymont, G., Costantini, E., Ebrero, J., Di Gesu, L., Harrison, F. A., Kaspi, S., Matt, G., Paltani, S., Peterson, B. M., Steenbrugge, K. C., & Walton, D. J. (2016): Anatomy of the AGN in NGC 5548. VIII. XMM-Newton's EPIC detailed view of an unexpected variable multilayer absorber, *Astronomy and Astrophysics*, 592, A27.
<https://doi.org/10.1051/0004-6361/201628464>
79. **Ursini, F.**, Petrucci, P.-O., Matt, G., Bianchi, S., Cappi, M., De Marco, B., De Rosa, A., Malzac, J., & Ponti, G. (2016): High-energy monitoring of Seyfert galaxies: The case of NGC 4593, *Astronomische Nachrichten*, 337, 552.
<https://doi.org/10.1002/asna.201612346>
80. Mehdipour, M., Kaastra, J. S., Kriss, G. A., Cappi, M., Petrucci, P.-O., De Marco, B., Ponti, G., Steenbrugge, K. C., Behar, E., Bianchi, S., Branduardi-Raymont, G., Costantini, E., Ebrero, J., Di Gesu, L., Matt, G., Paltani, S., Peterson, B. M., **Ursini, F.**, & Whewell, M. (2016): Anatomy of the AGN in NGC 5548. VII. Swift study of obscuration and broadband continuum variability, *Astronomy and Astrophysics*, 588, A139.
<https://doi.org/10.1051/0004-6361/201527729>
81. Lohfink, A. M., Ogle, P., Tombesi, F., Walton, D., Baloković, M., Zoghbi, A., Ballantyne, D. R., Boggs, S. E., Christensen, F. E., Craig, W. W., Fabian, A. C., Hailey, C. J.,

Harrison, F. A., King, A. L., Madejski, G., Matt, G., Reynolds, C. S., Stern, D., **Ursini, F.**, & Zhang, W. W. (2015): The Corona of the Broad-line Radio Galaxy 3C 390.3, *The Astrophysical Journal*, 814, 24.
<https://doi.org/10.1088/0004-637X/814/1/24>

82. **Ursini, F.**, Marinucci, A., Matt, G., Bianchi, S., Tortosa, A., Stern, D., Arévalo, P., Ballantyne, D. R., Bauer, F. E., Fabian, A. C., Harrison, F. A., Lohfink, A. M., Reynolds, C. S., & Walton, D. J. (2015): The NuSTAR X-ray spectrum of the low-luminosity active galactic nucleus in NGC 7213, *Monthly Notices of the Royal Astronomical Society*, 452, 3266.
<https://doi.org/10.1093/mnras/stv1527>
83. Di Gesu, L., Costantini, E., Ebrero, J., Mehdipour, M., Kaastra, J. S., **Ursini, F.**, Petrucci, P. O., Cappi, M., Kriss, G. A., Bianchi, S., Branduardi-Raymont, G., De Marco, B., De Rosa, A., Kaspi, S., Paltani, S., Pinto, C., Ponti, G., Steenbrugge, K. C., & Whewell, M. (2015): Anatomy of the AGN in NGC 5548. IV. The short-term variability of the outflows, *Astronomy and Astrophysics*, 579, A42.
<https://doi.org/10.1051/0004-6361/201525934>
84. **Ursini, F.**, Boissay, R., Petrucci, P.-O., Matt, G., Cappi, M., Bianchi, S., Kaastra, J., Harrison, F., Walton, D. J., di Gesu, L., Costantini, E., De Marco, B., Kriss, G. A., Mehdipour, M., Paltani, S., Peterson, B. M., Ponti, G., & Steenbrugge, K. C. (2015): Anatomy of the AGN in NGC 5548. III. The high-energy view with NuSTAR and INTEGRAL, *Astronomy and Astrophysics*, 577, A38.
<https://doi.org/10.1051/0004-6361/201425401>
85. Arav, N., Chamberlain, C., Kriss, G. A., Kaastra, J. S., Cappi, M., Mehdipour, M., Petrucci, P.-O., Steenbrugge, K. C., Behar, E., Bianchi, S., Boissay, R., Branduardi-Raymont, G., Costantini, E., Ely, J. C., Ebrero, J., di Gesu, L., Harrison, F. A., Kaspi, S., Malzac, J., De Marco, B., Matt, G., Nandra, K. P., Paltani, S., Peterson, B. M., Pinto, C., Ponti, G., Pozo Nuñez, F., De Rosa, A., Seta, H., **Ursini, F.**, de Vries, C. P., Walton, D. J., & Whewell, M. (2015): Anatomy of the AGN in NGC 5548. II. The spatial, temporal, and physical nature of the outflow from HST/COS Observations, *Astronomy and Astrophysics*, 577, A37.
<https://doi.org/10.1051/0004-6361/201425302>
86. Mehdipour, M., Kaastra, J. S., Kriss, G. A., Cappi, M., Petrucci, P.-O., Steenbrugge, K. C., Arav, N., Behar, E., Bianchi, S., Boissay, R., Branduardi-Raymont, G., Costantini, E., Ebrero, J., Di Gesu, L., Harrison, F. A., Kaspi, S., De Marco, B., Matt, G., Paltani, S., Peterson, B. M., Ponti, G., Pozo Nuñez, F., De Rosa, A., **Ursini, F.**, de Vries, C. P., Walton, D. J., & Whewell, M. (2015): Anatomy of the AGN in NGC 5548. I. A global

model for the broadband spectral energy distribution, *Astronomy and Astrophysics*, 575, A22.

<https://doi.org/10.1051/0004-6361/201425373>

87. Kaastra, J. S., Kriss, G. A., Cappi, M., Mehdipour, M., Petrucci, P.-O., Steenbrugge, K. C., Arav, N., Behar, E., Bianchi, S., Boissay, R., Branduardi-Raymont, G., Chamberlain, C., Costantini, E., Ely, J. C., Ebrero, J., Di Gesu, L., Harrison, F. A., Kaspi, S., Malzac, J., De Marco, B., Matt, G., Nandra, K., Paltani, S., Person, R., Peterson, B. M., Pinto, C., Ponti, G., Pozo Nuñez, F., De Rosa, A., Seta, H., **Ursini, F.**, de Vries, C. P., Walton, D. J., & Whewell, M. (2014): A fast and long-lived outflow from the supermassive black hole in NGC 5548, *Science*, 345, 64.
<https://doi.org/10.1126/science.1253787>

CONFERENCES AND SEMINARS

Invited talks:

[16 Sep 2024 – 19 Sep 2024] Huntsville, Alabama

IXPO: International X-ray POLarimetry Symposium

Invited talk: X-ray polarimetry of neutron-star low-mass X-ray binaries

Link: <https://sti.usra.edu/ixpo/>

[13 Jul 2024 – 21 Jul 2024] Busan, South Korea

45th COSPAR Scientific Assembly - COSPAR 2024

Invited talk: X-ray polarization observations of AGN

Link: https://www.cospar-assembly.org/admin/session_cospar.php?session=1244

[8 Jul 2024 – 12 Jul 2024] Sesto Val Pusteria, Italy

From the Dolomites to the event horizon

Invited talk: Warm coronae in AGN

Link: <https://www.sexten-cfa.eu/event/dolomites-2024/>

[29 Apr 2024 – 3 May 2024] Buenos Aires, Argentina

1st. Padova – Buenos Aires Workshop on Massive stars and Interacting Binaries

Invited talk: X-ray polarimetry of X-ray binaries with IXPE

Link: https://ganegroup.github.io/workshop/Workshop_on_Massive_stars

[23 Feb 2023 – 24 Feb 2023] Rome, Italy

ASI IXPE Workshop 2023

Invited talk: IXPE results on Radio-Quiet AGN

Link:

https://www.asi.it/wp-content/uploads/2023/01/agenda_workshop_IXPE_13febbraio2023.pdf

[15 Jul 2022 – 23 Jul 2022] Athens, Greece

44th COSPAR Scientific Assembly - COSPAR 2022

Invited talk: X-ray spectroscopy of AGN: the soft excess and implications for warm coronae

Links: https://www.cospar-assembly.org/admin/session_cospar.php?session=1065

[3 Jul 2022 – 7 Jul 2022] Sesto Val Pusteria, Italy

From the Dolomites to the event horizon

Invited talk: Warm coronae: Theory and Observations

Link: <http://www.sexten-cfa.eu/event/dolomites-2022/>

Contributed talks:

[10 Jul 2023 – 14 Jul 2023] Krakow, Poland

European Astronomical Society Annual Meeting 2023

Contributed talk: X-ray polarimetry of the torus in the Circinus galaxy

Link: <https://eas.unige.ch/EAS2023/>

[9 Oct 2023 – 13 Oct 2023] Nice, France

Multi-wavelength AGN Structure and Cosmological Applications

Contributed talk: X-ray polarimetry of the torus in the Circinus galaxy

Link: https://masca.sciencesconf.org/data/pages/Talk_prelim_Update.pdf

[26 Jun 2023 – 30 Jun 2023] Naples, Italy

The restless nature of AGN - 10 years later

Contributed talk: X-ray polarimetry of Seyferts and the nature of the hot corona

Link: <https://indico.unina.it/event/61/contributions/>

[13 Jun 2023 – 16 Jun 2023] Athens, Greece

The X-ray Universe 2023

Contributed talk: X-ray polarimetry of the torus in the Circinus Galaxy

Link: <https://www.cosmos.esa.int/web/xmm-newton/programme>

[13 Dec 2022 – 15 Dec 2022] Leiden

TORUS 2022 Workshop

Contributed talk: IXPE measurement of the X-ray polarization of the torus in the Circinus Galaxy

Link: <https://www.torus2022.nl/program.html>

[12 Sep 2022 – 16 Sep 2022] Prague, Czechia

31st Texas Symposium on Relativistic Astrophysics

Contributed talk: Constraining X-ray coronae with spectropolarimetry

Link: <https://texas2021.org/contributions>

[15 Jul 2022 – 23 Jul 2022] Athens, Greece

44th COSPAR Scientific Assembly - COSPAR 2022

Contributed talk: Neutron star low-mass X-ray binaries in the IXPE era

Link: https://www.cospar-assembly.org/admin/session_cospar.php?session=1071

[20 Jun 2022 – 22 Jun 2022] Cagliari, Italy

NuSTAR Science Meeting 2022: Ten Years of the High Energy Universe in Focus

Contributed talk: Constraining X-ray coronae with spectropolarimetry

Link: <https://nustar.github.io/nustar2022/program.html>

[23 May 2022 – 27 May 2022] Florence, Italy

Active Galactic Nuclei 14 - The Renaissance of Black Holes and Galaxies

Contributed talk: Constraining AGN coronae with spectropolarimetry

Link: <https://indico.ict.inaf.it/event/949/contributions/6537/>

[18 May 2022 – 20 May 2022] Monte Porzio Catone, Italy

1st Mondragone Frontiers of Astronomy Series

Contributed talk: Warm corona model for the soft X-ray excess of AGN

Link: <https://astrodragon.web.roma2.infn.it/schedule/>

[29 Mar 2022 – 31 Mar 2022] Toulouse, France

FERO 10 - Finding Extreme Relativistic Objects

Contributed talk: Estimating the size of X-ray lamp-post coronae in AGN

Link: <https://fero10.sciencesconf.org/program>

[30 Nov 2020 – 10 Dec 2020] Strasbourg, France (online)

AGN and Polarimetry Conference

Contributed talk: Constraining AGN coronae with X-ray polarimetry

Link: <https://polagn.astro.unistra.fr/Program.html>

[10 Feb 2019 – 14 Feb 2019] Geneva, Switzerland

12th INTEGRAL Conference

Contributed talk: High-energy view of hard X-ray selected radio galaxies

Link: <https://www.astro.unige.ch/integral2019/conference-program>

[8 Oct 2018 – 11 Oct 2018] Milan, Italy

Active Galactic Nuclei 13 - Beauty and the Beast

Contributed talk: The high-energy view of Seyfert galaxies through broad-band monitoring campaigns

Poster: Soft gamma-ray selected radio galaxies: a high-energy view of jetted AGNs

Links:

https://indico.ict.inaf.it/event/524/attachments/1018/2801/Scientific_Programme.pdf

<https://ui.adsabs.harvard.edu/#abs/2018agn.confE..31U/abstract>

<https://ui.adsabs.harvard.edu/#abs/2018agn.confE..32U/abstract>

[20 May 2018 – 24 May 2018] Monopoli, Italy

The radio and X-ray connection in accreting objects

Contributed talk: Restarting activity in hard X-ray selected giant radio galaxies?

Link: https://docs.wixstatic.com/ugd/f57b67_cdf9cee42c4e464588add1d2390458b6.pdf

[14 Oct 2017 – 19 Oct 2017] Venice, Italy

INTEGRAL Symposium 2017

Contributed talk: Where are Compton-thick radio galaxies?

Link: <http://www.iaps.inaf.it/sz/integral2017/programme.html>

[9 Jul 2017 – 13 Jul 2017] Sesto Val Pusteria, Italy

From the Dolomites to the event horizon

Contributed talk: X-ray monitoring of Seyfert galaxies: NGC 4593 and 3C 382

Link: <https://docs.google.com/file/d/1Dy-HsKJFITrJ8ECVFnUXBKgL2ijuroBo/view>

[25 Sep 2016 – 28 Sep 2016] Naples, Italy

Active Galactic Nuclei 12 - A Multi-Messenger perspective

Contributed talk: High-energy monitoring of NGC 4593 with XMM-Newton and NuSTAR

Links: http://astrofisica.fisica.unina.it/AGN12/AGN12/Scientific_program.html

<https://ui.adsabs.harvard.edu/#abs/2016agnt.confE..46U/abstract>

[12 Jul 2015 – 16 Jul 2015] Sesto Val Pusteria, Italy

From the Dolomites to the event horizon

Contributed talk: High-energy monitoring of Seyfert galaxies: the case of NGC 5548 and NGC 4593

Link: https://docs.google.com/file/d/1jr3QSE8gLWDH0o825XouZdhJ_R1hjWlE/view

[7 Jun 2015 – 9 Jun 2015] Madrid, Spain

The Extremes of Black Hole Accretion

Contributed talk: High-energy monitoring of Seyfert galaxies: The case of NGC 4593

Links: <https://www.cosmos.esa.int/documents/332006/514955/programme.pdf>
<https://ui.adsabs.harvard.edu/#abs/2016AN....337..552U/abstract>

[23 Mar 2015 – 25 Mar 2015] Bologna, Italy

NuSTAR Science Team Meeting

Contributed talk (AGN splinter session): The NuSTAR spectrum of NGC 7213

Link: <https://sites.google.com/site/nustarteammeeting/program>

[22 Sep 2014 – 25 Sep 2014] Trieste, Italy

Active Galactic Nuclei 11 - Where Black Holes and Galaxies Meet

Contributed talk: Anatomy of the AGN in NGC 5548

Link: <http://adlubitum.oats.inaf.it/meetings/AGN11-Sept2014/program.html>

[15 Jun 2014 – 18 Jun 2014] Dublin, Ireland

The X-ray Universe 2014

Contributed talk: Anatomy of the AGN in NGC 5548: the XMM/NuSTAR/INTEGRAL view

Links: <https://www.cosmos.esa.int/documents/332006/744603/programme.pdf>
<https://ui.adsabs.harvard.edu/#abs/2014xru..confE.199U/abstract>

[9 Sep 2012 – 11 Sep 2012] Rome, Italy

Active Galactic Nuclei 10 - Dall'orizzonte degli eventi all'orizzonte cosmologico

Contributed talk: Obscuration in Seyfert Galaxies by Broad Line Region clouds

Link: <http://webusers.fis.uniroma3.it/~agn10/programma.php>