Stefano Marchesi
Curriculum Vitae et Studiorum

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Research interests

AGN-galaxy co-evolution / Obscured AGN / Very High Energy Galactic sources/ Multi-wavelength follow-up of Very High Energy Galactic and extragalactic sources/ Simulations for new X-ray missions / X-ray surveys / High-redshift cosmology / AGN luminosity function

Work

February 2023 - January 2026 (expected):	TDA Researcher at Università di Bologna - Progetto CTA+. Referenti: Prof. Cristian Vignali; Dr Roberta Zanin
June 2021 - January 2023:	TD Researcher at INAF - Osservatorio di Astrofisica e Scienza dello Spazio di Bologna, Bologna (Italy).
July 2019-Today:	Adjunct Professor at Clemson University, Clemson, SC (USA).
June 2019-May 2021:	Post-doctoral fellow at INAF - Osservatorio di Astrofisica e Scienza dello Spazio di Bologna, Bologna (Italy). Supervisor: Dr Roberto Gilli
March 2016-June 2019:	Post-doctoral fellow at Clemson University, Clemson, SC (USA). Supervisor: prof. Marco Ajello.

Education

2012-2015:	PhD Student at the Department of Physics and Astronomy of Bologna University (Italy) Thesis: Black hole and galaxy growth over cosmic time: the Chandra COSMOS Legacy survey. Advisors: Professor Cristian Vignali, Dr Francesca Civano, Dr Andrea Comastri.
June-September 2015:	Visiting graduate student at Harvard-Smithsonian Center for Astrophysics (Cambridge, MA, USA).
November 2013-May 2015:	Visiting graduate student at Yale Center for Astronomy and Astrophysics (New Haven, CT, USA).
January-June 2013:	Visiting graduate student at Dartmouth College (Hanover, NH, USA).
2010-2012:	Master Degree in Astrophysics and Cosmology at the Department of Physics and Astronomy of Bologna. Thesis: *Redshift evolution of metal abundance in clusters of galaxies*. Advisors: Professor Fabrizio Brighenti, Dr Alessandro Baldi, Dr Stefano Ettori.
2007-2010:	Bachelor Degree in Astronomy at the Department of Physics and Astronomy of Bologna. Thesis: The solar activity and its role in terrestrial climate. Advisors: Professor Francesco Rosario Ferraro, Dr Barbara Lanzoni.

International collaborations membership

February 2023- Today	Member of the Cherenkov Telescope Array (CTA) collaboration. Part of the Extragalactic Working Group. In charge of the Data Validation process for the Internal Data Challenge (Spring 2024); coordinator of the Open Data Challenge (2024-2025)
May 2022- Today	CoI of the AXIS probe team. I work on end-to-end simulations of surveys, testing different AXIS technical configurations.
July 2022 - Today	Member of the High-Energy X-ray Probe (HEX-P) Black Hole Growth over Cosmic Time Pillar. I work on end-to-end simulations of surveys and on simulations of heavily obscured AGN spectra, testing different HEX-P technical configurations.
January 2023 - February 2024	CoI of the Survey and Time-domain Astrophysical Research eXplorer (STAR-X) mission, finalist of the NASA MIDEX.
June 2020-Today	Member of the Athena Scientific Working Group 2.1: *Formation and growth of the earliest SMBH* and 2.2: SWG 2.2 *Understanding the build-up of SMBH and galaxies*. I worked on the development of new mock catalogs of AGN and galaxies (presented in Marchesi et al. 2020, A&A, 642, 184) that are now extensively used in Athena simulations.
Summer 2013- Today	Member of the COSMOS collaboration. In charge (together with Dr Francesca Civano) of the Chandra COSMOS Legacy Survey.

Technical skills

X-ray

Expert in X-ray data reduction and analysis, for *Chandra* (with CIAO), XMM-*Newton* (with the Science Analysis System) and NuSTAR (HEASoft). Extended knowledge of XSpec and Sherpa. Expert in source detection with wavlet algorithms, and in creation of multi-wavelength catalogs of optical/IR counterparts using ML techniques. Expert in X-ray surveys simulations with SIXTE.

Optical/IR

Observational experience (both in situ and remote) with the multi-slit spectrograph MOSFIRE (Keck) and with the KOSMOS (COSMOS) spectrograph at Kitt Peak (Cerro Tololo). In particular, I have been involved in a multi-year campaign aimed at increasing the spectroscopic and classification completeness of the Third Fermi-LAT Catalog of High-Energy Sources (3FHL), which contains all the sources detected by Fermi-LAT in the 10 GeV-2 TeV band and will thus be an ideal catalog to select CTA follow-up targets.

Keck MOSFIRE, DEIMOS and KOSMOS/COSMOS optical spectra analysis with IRAF. Expert in spectral energy distribution fitting tools for photometric redshift and galaxy properties computation (e.g., Hyperz).

Computer skills
- Coding languages: Python (main language), Latex (expert), IDL (good), tcsh (basic), Awk (basic).
- Expert in using astronomical tools like Topcat and DS9.
- Extensive knowledge in data handling of large datasets.

Teaching

2023-Today	Course "Storia e Didattica dell'Astronomia", optional class in the Master Degree "Didattica e Divulgazione delle Scienze Naturali" at Bologna University, Italy.
2023-Today	Course "Istituzioni di Fisica", mandatory class in the Bachelor Degree "Compositi Polimerici" at Bologna University, Italy.
2019-Today	Teaching assistant in the "X-ray astrophysics laboratory", mandatory class in the Master Degree in Astrophysics at Bologna University, Italy. Reference: Prof. Cristian Vignali.
Spring 2018	Lesson on Comets in Dr Ádámkovics Undergrad course (ASTR-2200: Planetary Science), Clemson University, Clemson (SC)
Spring 2018	Three lessons on different astrophysical topics in Dr Ajello's Undergrad course (ASTR-1020: Stellar Astronomy), Clemson University, Clemson (SC)
Fall 2017	Four lessons on different astrophysical topics in Dr Ajello's Undergrad course (ASTR-1020: Stellar Astronomy), Clemson University, Clemson (SC)
Spring 2016	Lesson on Active Galactic Nuclei in Dr Ajello's Undergrad course (ASTR-3030: Galaxies and Cosmology), Clemson University, Clemson (SC)

Mentoring

2023-2024	Supervisor of Giorgia Ferrante, Master Thesis in "Didattica e Comunicazione delle Scienze Naturali". Title of the project: "Raccontare, ascoltare, comprendere: fiaba e scienza attorno a un focolare". Graduated in July 2024 with 110/110 *cum laude*.
2021-2024	Co-advisor of the PhD candidate Dhrubojyoti Sengupta (Advisor: prof Cristian Vignali. Mr Sengupta thesis project is focused on the characterisation of heavily obscured accreting supermassive black holes. Università di Bologna, Dipartimento di Fisica e Astronomia, Bologna (Italy).
2020-2024	Co-advisor, together with Dr Marco Ajello, of Núria Torres-Albà, PostDoctoral Fellow. Dr Albä main topic of research are variable obscured active galactic nuclei. Clemson University, Clemson (SC)
2018-2023	Co-advisor, together with Dr Marco Ajello, of the PhD candidate Mr Ross Silver. Mr Silver thesis project is focused on the discovery and characterization of heavily obscured, X-ray selected active galactic nuclei. Clemson University, Clemson (SC).
2017-2022	Co-advisor, together with Dr Marco Ajello, of the PhD candidate Jordan Eagle. Eagle thesis project was focused on the discovery and characterization of very high-energy Galactic sources detected using the *Fermi*-LAT telescope. Clemson University, Clemson (SC)
2018-2022	Co-advisor, together with Dr Marco Ajello, of the PhD candidate Meenakshi Rajagopal. Rajagopal thesis project was focused on the characterization of previously unclassified sources detected using the *Fermi*-LAT telescope. Clemson University, Clemson (SC)
2017-2021	Co-advisor, together with Dr Marco Ajello, of the PhD candidate Xiurui Zhao. Zhao thesis project was focused on the discovery and characterization of heavily obscured, X-ray selected active galactic nuclei. Clemson University, Clemson (SC).
2016-2017	Supervisor of David Dickson (undergraduate at Clemson University, SC) Project title: Spatial resolved metallicity in intermediate redshift galaxy clusters
2016-2017	Supervisor of Jonathan Kadan and Kellye Burns (undergraduates at Clemson University, SC). Project title: Rare sources in the 100-month BAT catalog
2016-2017	Supervisor of Luke Tramblay (undergraduate at Clemson University, SC) Project title: X-ray spectral analysis of Swift-BAT selected low-luminosity AGN

Awarded observing time

2024	Very Large Telescope (VLT)	Tracing the structure of an assembling z=2.8 protocluster with FORS2 (ESO Cycle 113, proposal 113.26C5, 12 hours with FORS2 spectrograph)
2023	Large Binocular Telescope (LBT)	Tracing the structure of an assembling z=2.8 protocluster with MODS (Proposal IT-2023B-013, 12 hours with MODS spectrograph)
2023	Chandra	Searching for hidden accreting supermassive black holes in the first JWST-EIGER field (Chandra Cycle 25, Proposal 25700245, 200 ks)
2023	New Technology Telescope	Outside the halo: Tracking the Mpc-scale structure of a z~1.7 protocluster with SoFI (ESO Cycle 111, 0.6 nights with SoFI)
2022	NuSTAR	2FHLJ1745.1-3035: A New Efficient Galactic Accelerator (Proposal 8046, Cycle 8, 100 ks)
2021	Large Binocular Telescope (LBT)	Spectroscopically confirming with MODS three candidate obscured z>5 AGN in the deep J1030 Field (Proposal 2021/2022_35, 8 hours)
2021	NuSTAR + XMM-Newton	A joint *NuSTAR* and XMM-*Newton* monitoring of a candidate changing-look Compton thick AGN (Proposal 7192, *NuSTAR* Cycle 7, 75+75 ks)
2020	Chandra	A spatially resolved X-ray analysis of an extreme candidate pulsar wind nebula (Proposal 22500360, Cycle 22, 25 ks)
2019	XMM-Newton	A XMM-*Newton* monitoring of a candidate changing-look Compton thick AGN (Proposal 086298, Cycle AO-19, 28 ks)
2019	Chandra	Compton thick AGN: the hunt continues (Proposal 21700085, Cycle 21, 50 ks)
2019	NuSTAR + XMM-Newton	The Compton thick AGN Legacy Project: a complete sample of NuSTAR-observed nearby Compton thick AGNn (*NuSTAR* Large program 5197, Cycle 5, 500+220 ks)
2018	Gemini-N, Gemini-S	Towards a full 3D mapping of the >10 GeV extragalactic sky: a spectroscopic follow-up campaign of unidentified 3FHL sources (Fermi proposal 111128, Cycle 11, 5 nights)
2018	Gemini-S	Characterizing a shock-cloud interaction on the Western edge of the Vela SNR (coI; Fermi proposal 111197, Cycle 11, 1 night)
2018	NuSTAR + XMM-Newton	Heavily obscured AGN: the physics behind the obscuration (*NuSTAR* Proposal 4253, Cycle 4, 90+60 ks)
2018	Swift-XRT	The Legacy of Swift-BAT: The Tale of AGN at Hard X-rays (Proposal 1417036, Cycle 14, 145 ks)
2017	Chandra	Compton thick AGN: the hunt continues (Proposal 19700430, Cycle 19, 40 ks)
2017	NuSTAR + XMM-Newton	Compton thick AGN: the physics behind the obscuration (Proposal 3258, *NuSTAR* Cycle 3, 100+100 ks)
2017	KPNO-CTIO 4m-telescopes	Full 3D Mapping And Identification Of The >10 Gev Extragalactic Sky (Fermi proposal 101287, Cycle 10, 15 nights)
2017	Swift-XRT	ToO observation of 2FHL J0705.9+0245 (ObsID 10047, 3 ks)
2016	KPNO 4m-telescope	Towards the first complete sample of >50 GeV blazars (NOAO 17A, 12 hours)
2016	XMM-Newton + NuSTAR	The Unique Case of PKS J1220+0203: a jetted AGN with a broad Iron Line (*XMM-Newton* AO16, 50+50 ks; co-I)

Awarded research funding

2023	NASA Astrophysics Data Analysis, proposal "Unveiling Obscured Accretion in the Local Universe": 300 k$.
2023	*NuSTAR* proposal 7192, XMM-*Newton* fair share: 20 k$.
2022	Finanziamento di Astrofisica Fondamentale INAF. 20 k€.
2021	*NuSTAR* proposal 7192, 99 k$.
2020	PRIN-INAF 2019, proposal "Piercing through the clouds: a multiwavelength study of obscured accretion in nearby supermassive black holes". Funded as "Coordinatore speciale". 34+70 k€.
2020	*Chandra* proposal 22500360, 22 k$.
2019	*NuSTAR* proposal 5197, 116 k$.
2019	*Chandra* proposal 21700085, 61 k$.
2019	*NuSTAR* proposal 5197, XMM-Newton fair share: 36 k$.
2018	NASA Astrophysics Data Analysis, proposal "Compton-Thick AGN: the Final Quest": 250 k$ (scientific PI).
2018	*Fermi* proposal 111128: 60 k$.
2018	*Fermi* proposal 111197: 60 k$ (scientific PI).
2018	*NuSTAR* proposal 04253. 75k$.
2017	*Chandra* proposal 19700430. 63 k$.
2017	*Fermi* proposal 101287. 60 k$.
2017	*NuSTAR* proposal 03258. 55 k$.

Awards

2020	Premio congiunto SAIt-SIF "Giovanni Bignami" (https://www.sif.it/attivita/altri_premi/bando_bignami/vincitori).

Peer reviewing

2016-Today	Referee for the Astrophysical Journal, Monthly Notices of the Royal Astronomical Society, and Astronomy and Astrophysics.
April 2023	Member of the Fermi Cycle 16 peer review panel.
January 2022	Member of the NICER Cycle 4 peer review panel.
June 2021	Member of the *Chandra* Cycle 23 peer review panel.
2018-2021	Member of the evaluation committee of Mr Xiurui Zhao Graduate Research project, Clemson University, Clemson, SC (USA).
August 2019	Member of the NASA Astrophysics Data Analysis proposal evaluation panel.
March 2018	Member of the *NuSTAR* Cycle 4 peer review panel.

Scientific contribution to conferences and seminars in the last five years

1	*July 2024*	Galaxies and diffuse gas in large-scale overdense environments at high redshift Workshop. Sexten (Italy). Invited talk.
2	*July 2024*	MAGIC Collaboration Meeting. Online. Invited talk.
3	*April 2024*	CTAO Symposium, Bologna, (Italy). Contributed poster and flash talk.
4	*December 2023*	Workshop "Open Science @ INAF". Rome (Italy). Contributed talk.
5	*June 2023*	Conference "The restless nature of AGN: 10 years later". Napoli (Italy). Contributed poster.
6	*May 2023*	MAGIC Collaboration Meeting. Online. Invited talk.
7	*February 2023*	Workshop "IXPE: la nuova finestra osservativa sul cosmo ad alte energie". Rome (Italy). Invited talk.
8	*January 2023*	Workshop "Getting Ready To Descend The Slippery Slope Of Multimessanger Cosmological Black Holes Data". Sexten (Italy). Invited talk.
9	*December 2022*	National Observatory of Athens, Athens (Greece). Invited (virtual) colloquium.
10	*November 2022*	Exploring the Hot and Energetic Universe: the third scientific conference dedicated to the Athena X-ray Observatory. Barcelona (Spain). Contributed talk.
11	*July 2022*	COSPAR 2022 44th Assembly. Athens (Greece). Contributed talk.
12	*June 2022*	Multiphase Agn Feeding & Feedback II: Linking The Micro To Macro Scales In Galaxies, Groups, And Clusters. Sexten (italy). Invited talk.
13	*June 2022*	Ten years of High-Energy Universe in Focus: NuSTAR 2022 meeting. Cagliari (Italy). Contributed talk.
14	*April 2022*	Clemson University, Clemson, SC (USA). Invited colloquium.
15	*February 2022*	Harvard-Smithsonian Center for Astrophysics, Cambridge, MA (USA). Invited high-energy (virtual) seminar. https://www.youtube.com/watch?v=Eei6SFVQIfs
16	*January 2022*	Quasars and Galaxies through Cosmic Time 2022 Virtual Conference. Contributed talk. https://www.youtube.com/watch?v=es2_8bXDr58
17	*December 2020*	Supermassive Black Holes Conference. Virtual. Contributed talk.
18	*November 2020*	Space Telescope Science Institute. Invited (virtual) talk.
19	*October 2020*	Young Astronomers on Galactic Nuclei Virtual Conference. Contributed talk.
20	*June 2020*	INAF-OAS Bologna, Bologna (Italy). Invited (virtual) talk. https://www.youtube.com/watch?v=6xUZZASb37s
21	*October 2019*	Clemson University, Clemson, SC (USA). Invited colloquium.
22	*October 2019*	Accretion History of AGN Workshop, Miami, FL (USA). Contributed talk.
23	*September 2019*	X-ray Astronomy 2019 Conference, Bologna (Italy). Contributed poster.
24	*July 2019*	Hot topics in Astrophysics Meeting, Sexten (Italy). Contributed talk.

Public outreach and community service

June 2024	Chair of the Local Organizing Committee of the Italian part of the CTAO Summer School. Bertinoro, FC (Italy).
November 2023	Member of the team organizing the CTA public outreach stand at the "Futuro Remoto" Science Festival in Napoli (Italia).
November 2022-Today	Public outreach events at the high school "Liceo Ulivi" in Parma (Italy). Presentation of different astrophysics topics (such as the solar activity and its connection to climate changes on Earth, or the formation and evolution of galaxies and supermassive black holes). These events have been the starting point for the students to take part at different Science competitions. Reference: prof. Niccolò Vernazza (n.vernazza@liceoulivi.it)
September 2019	Member of the Local Organizing Committee at the Bologna X-ray Astronomy 2019 Conference. Reference: prof. Marcella Brusa (marcella.brusa3@unibo.it)
October 2018	Judge at the public outreach competition for graduate students "3MT - Three Minutes Talk", Clemson University, Clemson, SC (USA).
August 2018	Judge at the PhD Students talk competition at the Symposium for Research in Physics and Astronomy, Clemson University, Clemson, SC (USA)
April 2018	Judge at the GRADS poster competition, Clemson University, Clemson, SC (USA)
July 2016-2018	Judge at the 4th, 5th and 6th Annual Summer Undergraduate Research Symposium, Clemson University, Clemson, SC (USA).
April 2016- June 2019	Host of shows at the Clemson Planetarium, Clemson, SC (USA), on a regular schedule.
April 2015	Co-organizer of the Yuri's night, public astronomy-related event at Leitner Family Observatory and Planetarium, New Haven, CT (USA).
2014-2015	Judge at the annual New Haven Science Fair, New Haven, CT (USA).

Schools and workshops

June 2014	Yale Software Bootcamp, New Haven, CT (USA). Training and work hands-on with the Unix shell, git and Python.
June 2014	10th Summer School of Astrostatistics, State College, PA (USA). Training in statistical tools and their application to astrophysical topics. Theoretical lessons and hands-on exercises.
April 2013	9th Chandra/CIAO Workshop, Cambridge, MA (USA). Chandra data reduction and analysis (both imaging and spectroscopy).
December 2013	Virtual Observatory Workshop, Rome (Italy). Work hands-on on several tools for astronomical data analysis (TOPCAT, Aladin, VO).

References

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Publications list

4992 citations, 636 citations to first author papers, h-index: 33 (as of August 26, 2024; statistics taken from the SAO/NASA Astrophysics Data System). ORCID-ID: 0000-0001-5544-0749.

First author publications
1. Marchesi, S., Eagle, J. Et al.: 2FHL J1745.1–3035: A Newly Discovered, Powerful Pulsar Wind Nebula Candidate, 2024, ApJ, 964, 132.
2. Marchesi, S., Mignoli, M. et al.: LBT-MODS spectroscopy of high-redshift candidates in the Chandra J1030 field. A newly discovered z ~ 2.8 large-scale structure, 2023, A&A, 673, 97.
3. Marchesi, S., Zhao, X. et al.: Compton-Thick AGN in the NuSTAR era VIII: A joint NuSTAR-XMM-Newton monitoring of the changing-look Compton-thick AGN NGC 1358, 2022, ApJ, 935, 114.

4. <u>Marchesi, S.</u>, Mignoli, M. et al.: Redshift identification of X-ray selected active galactic nuclei in the J1030 field: searching for large-scale structures and high-redshift sources, 2021, A&A, 656, 117.

5. <u>Marchesi, S.</u>: Understanding the black hole-galaxy connection: a multi-X-ray observatory approach, 2021, Memorie della Società Astronomica Italiana, 92, 1.

6. <u>Marchesi, S.</u>, Gilli, R. et al.: Mock catalogs for the extragalactic X-ray sky: Simulating AGN surveys with ATHENA and with the AXIS probe, 2020, A&A, 642A, 184.

7. <u>Marchesi, S.</u>, Ajello, M. et al.: Compton Thick AGN in the NuSTAR era V: Joint NuSTAR and XMM-Newton spectral analysis of three "soft-Gamma" candidate CT-AGNs in the Swift-BAT 100-month catalog, 2019, ApJ, 882, 162.

8. <u>Marchesi, S.</u>, Ajello, M. et al.: Compton Thick AGN in the NuSTAR era III: A systematic study of the torus covering factor, 2019, ApJ, 872, 8.

9. <u>Marchesi, S.</u>, Kaur., A., Ajello, M.: Identifying the 3FHL Catalog. II. Results of the KOSMOS Optical Spectroscopy Campaign, 2018, AJ, 156, 212

10. <u>Marchesi, S.</u>, Ajello, M. et al.: Compton Thick AGN in the NuSTAR era, 2018, ApJ, 854, 49

11. <u>Marchesi, S.</u>, Tremblay, L. et al.: Chandra and NuSTAR follow-up observations of Swift-BAT selected AGN, 2017, ApJ, 848, 53

12. <u>Marchesi, S.</u>, Ajello, M. et al.: X-Ray Spectral Properties of Seven Heavily Obscured Seyfert 2 Galaxies, 2017, ApJ, 836, 116

13. <u>Marchesi, S.</u>, Lanzuisi, G. et al.: The Chandra COSMOS-Legacy survey: Source X-ray spectral properties, 2016, ApJ, 830, 100

14. <u>Marchesi, S.</u>, Civano, F. et al.: The z>3 sample in the Chandra COSMOS Legacy Survey, 2016, ApJ, 827, 150

15. <u>Marchesi, S.</u>, Civano, F. et al.: Optical counterparts of the Chandra COSMOS Legacy Survey, 2016, ApJ, 817, 34

Other publications

1. Greenwell, C.L. et al.: The NuSTAR Serendipitous Survey: The 80 Month Catalog and Source Properties of the High-energy Emitting Active Galactic Nucleus and Quasar Population, 2024, ApJS, 273, 20.

2. Peca, A. et al.: Stripe 82-XL: the ~54.8 deg2 and ~18.8 Ms Chandra and XMM-Newton point source catalog and number of counts, 2024, ApJ (Accepted).

3. CTA-LST Project: A detailed study of the very-high-energy Crab pulsar emission with the LST-1, 2024, A&A (Accepted).

4. Mazzolari, G. et al.: Heavily Obscured AGN detection: a Radio vs X-ray challenge, 2024, A&A, 687, 120.

5. Cappelluti, N., Foord, A., <u>Marchesi, S.</u> et al.: Surveying the Onset and Evolution of Supermassive Black Holes at High-z with AXIS, 2024, Universe, 10, 276.

6. Peca, A., Cappelluti, N., <u>Marchesi, S.</u> et al.: X-ray Redshifts for Obscured Active Galactic Nuclei with AXIS Deep and Intermediate Surveys, 2024, Universe, 10, 245.

7. Fukumura, K. et al.: Dual Role of Accretion Disk Winds as X-ray Obscurers and UV Line Absorbers in AGN, 2024, ApJ, 968, 70.

8. Baldini, P. et al.: Winds of change: the nuclear and galaxy-scale outflows and the X-ray variability of 2MASS 0918+2117, 2024, A&A, 686, 217.

9. Foord, A., et al.: Tracking Supermassive Black Hole Mergers from kpc to sub-pc Scales with AXIS, 2024, Universe, 10, 237.

10. Boorman, P.G. et. al.: The High-Energy X-ray Probe (HEX-P): the circum-nuclear environment of growing supermassive black holes, 2024, FrASS, 11, 1335459.

11. Pfeifle, R.W. et al.: The high energy X-ray probe (HEX-P): the future of hard X-ray dual AGN science, 2024, FrASS, 11, 1304652.
12. Barchiesi, L. et al.: COSMOS2020: Investigating the AGN-obscured accretion phase at z~1 via [NeV] selection, 2024, A&A, 685, 141.
13. Pouliasis, E. et al.: AGN X-ray luminosity function and absorption function in the Early Universe (3<z<=6), 2024, A&A, 685, 97.
14. Zhao, X. et al.: PEARLS: NuSTAR and XMM-Newton Extragalactic Survey of the JWST North Ecliptic Pole Time-Domain Field II, 2024, ApJ, 965, 188.
15. Civano, F. et al.: The high energy X-ray probe (HEX-P): bringing the cosmic X-ray background into focus, 2024, FrASS, 11, 1340719.
16. Cox, I. et al.: A Simple Method for Predicting NH Variability in Active Galactic Nuclei, 2023, ApJ, 958, 155.
17. Fichet de Clairfontaine, G. et al.: Hadronic Processes at Work in 5BZB J0630-2406, 2023, ApJL, 958, 2.
18. Auge, C. et al.: The Accretion History of AGN: The Spectral Energy Distributions of X-Ray-luminous Active Galactic Nuclei, 2023, ApJ, 957, 19.
19. Reynolds, C.S. et al.: Overview of the advanced x-ray imaging satellite (AXIS), 2023, Proceedings of the SPIE, 12678.
20. Torres-Albà, N., <u>Marchesi, S.</u> et al.: Hydrogen column density variability in a sample of local Compton-thin AGN, 2023, A&A, 678, 154.
21. Sengupta, D., <u>Marchesi S.</u> et al.: Compton-thick AGN in the NuSTAR Era X: Analysing seven local CT-AGN candidates, 2023, A&A, 676, 103.
22. Signorini, M,, <u>Marchesi, S.</u> Et al.: X-ray properties and obscured fraction of AGN in the J1030 Chandra field, 2023, A&A, 676, 49.
23. Silverman, J.D. et al.: Resolving Galactic-scale Obscuration of X-Ray AGNs at z ≳ 1 with COSMOS-Web, 2023, ApJL, 951, 41.
24. Feltre, A. et. Al.: Optical and mid-infrared line emission in nearby Seyfert galaxies, 2023, A&A, 675, 74.
25. Silver, R. et al.: A New Mid-Infrared and X-ray Machine Learning Algorithm to Discover Compton-thick AGN, 2023, A&A, 675,65.
26. Georgantopoulos, I. et al.: Comparing the host galaxy ages of X-ray selected AGN in COSMOS. Obscured AGN are associated with older galaxies, 2023, A&A, 673, 67.
27. Brienza, M. et al.: AGN feedback in an infant galaxy cluster: LOFAR-Chandra view of the giant FRII radio galaxy J103025+052430 at z = 1.7, 2023, A&A, 672, 179.
28. Peca, A. et al.: On the Cosmic Evolution of AGN Obscuration and the X-Ray Luminosity Function: XMM-Newton and Chandra Spectral Analysis of the 31.3 deg^2 Stripe 82X, 2023, ApJ, 943, 62.
29. Rajagopal, M. et al.: Identifying the 3FHL Catalog. VI. Results of the 2019 Gemini Optical Spectroscopy, 2023, AJ, 165, 42.
30. Pal, I. Et al.: X-ray spectral and timing analysis of the Compton Thick Seyfert 2 galaxy NGC 1068, 2022, MNRAS, 517, 3341.
31. Silver, R. et al.: Compton-thick AGN in the NuSTAR Era. IX. A Joint NuSTAR and XMM-Newton Analysis of Four Local AGN, 2022, ApJ, 940, 148.
32. Joffre, S. et al.: Identifying the 3FHL Catalog. VI. Swift Observations of 3FHL Unassociated Objects with Source Classification via Machine Learning, ApJ 940, 139.

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