Fabio Pacucci

Curriculum Vitae & Publication List
Updated: February 27, 2026

Center for Astrophysics
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Academic Summary

Scientific Publications (as First Author)	215	(83)
Citations in ADS (Google Scholar)	7100+	(7200+)
H-index in ADS (Google Scholar)	47	(43)
m-index in ADS (Google Scholar)	3.6	(3.3)
Talks (Review, Invited, Contributed)	123	(14, 72, 37)
Student Direct Supervision (Graduate, Undergraduate)	31	(8, 23)
Directly Supervised Student-Led Papers	11	
Awards and Grants	$1.1M	
Press Releases (Major) — covering my first-author work	6	(2)
Public Outreach Talks — in-person and virtual	100+	

Experience

since 2025	**Staff Astrophysicist**,	*Center for Astrophysics | Harvard & Smithsonian, Cambridge (MA)*, USA.
since 2025	**Senior Member of the Institute for Theory and Computation**,	*Harvard University, Cambridge (MA)*, USA.
2019–2025	**Clay Fellow & BHI Fellow**,	*Center for Astrophysics | Harvard & Smithsonian, Cambridge (MA)*, USA.
2019	**NOVA Fellow**,	*Kapteyn Astronomical Institute*, Netherlands.
2016–2018	**Postdoctoral Research Associate**,	*Yale University — Department of Physics, New Haven (CT)*, USA.

Education

2013–2016	**Ph.D. in Physics**, *Scuola Normale Superiore (SNS)*, Italy.	
	Thesis title: *The First Black Holes in the Cosmic Dark Ages*	
	Advisor: Prof. Andrea Ferrara, Grade: 70/70 cum laude	
2011–2013	**M.S. in Astrophysics with Honors**, *University of Rome, Sapienza*, Italy.	
	Grade: 110/110 cum laude	
2008–2011	**B.S. in Physics with Honors**, *University of Rome, Sapienza*, Italy.	
	Grade: 110/110 cum laude	

Biographical Information

Gender:	Male
Birthplace:	Taranto, Italy
Citizenship:	Italy & USA

Current Research Interests

Black hole formation and evolution — Black hole seeding — Little Red Dots — Galaxy formation and evolution — High-redshift Universe — Cosmology — Wandering black holes — Intermediate-mass black holes — Supermassive black holes — Quasars — Multi-wavelength surveys — Time-domain astronomy — Tidal disruption events — Multi-wavelength data analysis — GR(R)MHD simulations — Cosmological simulations — N-body simulations — Machine learning — Astro-statistics

Prizes & Awards

2025	**"Anello di San Cataldo" Prize** — Awarded by the City of Taranto for outstanding contributions to the promotion and dissemination of scientific culture
2019	**Clay Fellowship (SAO)**
2019	**BHI Fellowship (Harvard University)**
2017	**Livio Gratton Prize** — Best Ph.D. Thesis in Astronomy in Italy (2014-2016)
2017	**American Astronomical Society "International Travel Grant" Award**
2016	**IAU Ph.D. Prize** — International Astronomical Union prize for Ph.D. Thesis
2016	**Yale Postdoctoral Scholars Travel Fund Award**
2012	**Enrico Persico Prize 2011-2012** — Accademia Nazionale dei Lincei prize for exceptional achievements in Physics
2012	**ASI-ISSNAF (Italian Space Agency) 2012 Internship Program Winner**
2007 — 2012	**Fellowship at the "Lamaro-Pozzani" University College in Rome**
2007	**Rotary Club Prize** — Exceptional achievements during high-school studies

Grants, Fellowships, and Observing Programs

Fellowships:

Name	Years	Award
Clay Fellowship	2022 — 2025	$\sim$ \$375,000
BHI Fellowship	2019 — 2022	$\sim$ \$360,000
NOVA Fellowship	2019	$\sim$ \$70,000

Awarded Observing Programs as Principal Investigator:

Telescope	Year	Type	Time	Target	Award
Chandra	2024	DDT	10 ks	Gaia BH3	$31,790
JWST	2023	GO	12.38 hrs	Leo I dSph	$88,455
Gemini-S	2023	DDT	6.5 hrs	Leo I dSph	N/A
VLA	2022	DDT	2 hrs	Leo I dSph	N/A
SMA	2022	DDT	6.7 hrs	Leo I dSph	N/A
VLA	2022	DDT	0.75 hr	Leo I dSph	N/A
Chandra	2022	DDT	30 ks	Leo I dSph	$22,050
Chandra	2022	GO	250 ks	HD2	$87,200
Keck	2018	GO	2 nights	CR7	N/A
Chandra	2017	THEORY	N/A	N/A	$87,000

Publication Record (Highlights)

Number of scientific publications (papers, proceedings, funded proposals): 215
Number of first-author scientific publications: 83
Number of refereed papers: 135
Number of directly supervised student-led scientific publications: 10
Number of citations (ADS): 7100+
H-index (ADS): 47
m-index (ADS): 3.6
Link to Personal ADS Library
A full publication list is reported at the end of this document.

Teaching Recognition

May 2024   **Harvard Derek Bok Center for Teaching and Learning** recognition for exceptional teaching for the course FYSEMR 21G: Genesis of Stars and Life in the Universe, Spring 2024.

Teaching Experience

2024   **Teaching Assistant** for the Freshman Seminar classes in Spring 2024 at Harvard University (1 semester).

2023   **Guest Lecturer** for the course "Genesis of Stars And Life In The Universe" at Harvard University, for undergraduate students majoring in Astronomy (2 classes).

2017   **Guest Lecturer** for the course "Gravity, Astrophysics, and Cosmology" at Yale University for undergraduate students majoring in Astronomy (2 classes).

2013 — 2015   **Teaching Assistant** for several undergraduate courses (SNS, Italy): classical mechanics, electromagnetism, general relativity, linear algebra.

2015   **Teaching Assistant** for the graduate course "Structure Formation in the Early Universe" (SNS, Italy).

Experience as Research Advisor and Mentor

Graduate Students (8)

since 2024	Valentina La Torre, Tufts University
2024	Umasree Thekkemadam, University of Miami
since 2024	Emma Weller, Yale University
2024	Jasmine Gill, Harvard University
2024	Victoria DiTomasso, Harvard University
2023	Fabiola Cocchiararo, University of Milan-Bicocca
since 2023	Emmanuel Durodola, Dartmouth College
2023	Aurora Abbondanza, University of Rome — Sapienza

Undergraduate Students (23)

since 2025	Saphina Chisek-Singh, Harvard University
2024	Astrid Liu (HCRP program winner), Harvard University
2024	Sarah Pinto, Harvard University
2024	Truman Pauley Harvard University
2024	Emiliano Maldonado, Harvard University
2024	Callie Garcia, Harvard University
2024	Annika Geiersbach (HCRP program winner), Harvard University
since 2024	Cal Guia (HCRP program winner), Harvard University
since 2023	Bao (Tintin) Nguyen, University of Arizona
2023	Daria-Teodora Harabor (HCRP program winner), Harvard University
2023	Bruna Biz (PRISE program winner), Harvard University
2022 — 2023	Sofia Martinez (Senior Thesis), Harvard University
2022	Bella Tarantino, Harvard University
2022 — 2023	Rui Zhe Lee, Harvard University
2022	Rafid Quayum (PRISE program winner), Harvard University
2021 — 2023	Bryan Seepaul (PRISE program winner), Harvard University
2021 — 2023	Emma Weller (PRISE program winner), Harvard University
2020 — 2022	Lucia Gordon, Harvard University
2020 — 2022	Sarah Gardner, Ossining High School (NY)
2021	Ray Fitzgerald, Harvard University
2021	Kaylie Hausknecht, Harvard University
2021	Emmanuel Durodola, Banneker Institute Program at Harvard University and California State University
2018	Qingyuan Qian, Great Neck North High School (NY)

Professional Service and Collaborations

Peer-Review

- Referee: Nature, ApJ, ApJ Letters, Nature Astronomy, MNRAS, MNRAS Letters, Astronomy & Astrophysics, JCAP, Physical Review Letters
- Peer Reviewer: Chandra TAC
- Peer Reviewer: JWST TAC
- Peer Reviewer: NSF Division of Astronomical Sciences
- Peer Reviewer: NASA Astrophysics Division FINESST (multiple years)
- Peer Reviewer: AAS Chambliss award (multiple years)
- Peer Reviewer: NASA NICER GO (multiple years)

Service & Memberships

International Community Level

2025 – 2028	Member of the Executive Committee of NASA PhysPAG
since 2025	Co-Chair of NASA's Habitable Worlds Observatory Science Interest Group (SIG)
2025 – 2028	Co-Chair of the X-ray Science Interest Group (SIG) of NASA Physics of the Cosmos Program
since 2025	Co-Chair of the NASA Science Analysis Group (SAG) for the conceptual development of a "Lynx2030" mission for the Astro2030 Decadal Survey
since 2024	Member of the Steering Committee of the AGN Working Group for the NASA Habitable Worlds Observatory
since 2023	Member of the AXIS X-ray Telescope Science Team (selected for Phase A)
since 2016	Full Member of the American Astronomical Society
since 2025	Full Member of the American Physical Society
since 2024	Full Member of International Astronomical Union
since 2023	Member of the JWST/CEERS Collaboration
since 2023	Member of NASA's New Great Observatories Science Analysis Group
since 2023	Member of the Scientific Advisory Council of the ATA, Associazione Tuscolana di Astronomia
2023	Member of the AAS Congressional Visit Group 2023 in Washington, DC
2018 – 2014	Junior Member of International Astronomical Union
2018 – 2019	Member of the IAU Executive Committee for Junior Members
since 2018	Associate Member of LISA Consortium
since 2016	Member of Scuola Normale Superiore Alumni Association
since 2012	Member of ISSNAF (Italian Scientists and Scholars in North America Foundation)
since 2013	Member of the Collegio Universitario "Lamaro-Pozzani" Alumni Association

University/Department Level

since 2023	Member of the CfA Early Career Workshop Committee.
2020 – 2024	Member of the Center for Astrophysics Postdoc Committee
2021	Member of the Postdoc Committee for the CfA Director's search

Diversity, Equity and Inclusion Initiatives

since 2024	Member of the Working Group of the AAS on International Students and Scholars
since 2024	Participant as a mentor in the pilot edition of the "Mentoring Constellation" program at the CfA to provide support and guidance for young scientists.
2023 — 2024	Co-Organizer of the AAS 243 Meeting Special Session "International Students and Researchers in Astronomy: Issues and a Path Forward"
since 2023	Early Career Researcher representative for the "IDEAS, Education and Public Engagement" committee of the CfA 10-year Strategic Plan.
since 2021	Original promoter and co-organizer of the "Distratis Scholarship" in memory of Cosimo Distratis — teacher, amateur scientist, and long-time supporter of science education. The scholarship funds the study of undergraduate students in Physics from underprivileged rural communities in the south of Italy.
2021	Attended "Intensive Science Undergraduate Mentoring Workshop at Harvard Faculty of Arts and Science" with a particular focus on promoting DEI practices in mentoring activities.
2021	Mentor for the Banneker Institute program at Harvard, which prepares undergraduate BIPOC students for graduate programs in astronomy, focusing on research, graduate coursework, and social science education.
since 2018	Mentored a very diverse cohort of students at the high school and undergraduate levels.

Scientific Organizing Committees

- SOC Chair of the MIT/Harvard Meeting: "BABAM! Boston-Area Blackhole Accretion Meeting" (2023)
- Co-Organizer of the AAS 243 Meeting Special Session "International Students and Researchers in Astronomy: Issues and a Path Forward" (2023)
- SOC Chair for the Annual BHI Conference (since 2020)
- SOC Member for the CfA Colloquium Series (since 2020)
- SOC Chair for the BHI Colloquium Series (since 2019)
- SOC Member for the Conference "Accretion History of AGN", Miami (FL), USA (2019)
- Session Chair for the AAS 240th Meeting (2022)
- Session Chair for the AAS 236th Meeting (2020)

Seminars and Colloquia

Review and Prize Talks

December 2025	**Highlighted Talk, Smithsonian Institution Advancement Event, Boston Public Library** Upbringing of an Astronomer

October 2025	**Keynote Talk, Harvard Science Research Conference 2025** Black Holes From the Nearby to the Faraway Universe
October 2025	**Review Talk, AAS HEAD Meeting 2025** NASA's Lynx+ Science Analysis Group: Preparation for Astro 2030
August 2025	**Panelist, 2025 Santa Cruz Galaxy Meeting** Blumenthal, Faber, Primack & Rees at 41: What did they get right? What did they get wrong? What are the big open questions?
December 2023	**Review Talk, "Intermediate-Mass Black Holes: The Dawn of a Revolutionary Era" Conference, Belize** Intermediate-Mass Black Hole Seeds
September 2023	**Review Talk, ITC Discussion, Center for Astrophysics | Harvard & Smithsonian, Cambridge (MA), USA** Overmassive Black Holes in Dwarf Galaxies: The Strange Case of Leo I
August 2023	**Talk, Copenhagen Developers Festival, Copenhagen, Denmark** Space Awe
April 2023	**Clay Lecture, Center for Astrophysics, Cambridge (MA), USA** Searching for Black Holes From the Nearby to the Faraway Universe
August 2022	**PAX-22 Workshop, MIT, Cambridge (MA), USA** Observational Signatures of the First Black Holes
June 2022	**Astrophysics in the Next Decade: From the First Stars to Intelligent Life, Martha's Vineyard (MA), USA** To the Most Distant Galaxy and Beyond: A Scientific Journey
June 2021	**Aspen Center for Physics, 2021 Summer Program, Aspen (CO), USA** Black Hole Formation and Growth in the High Redshift Universe
August 2018	**IAU General Assembly, Vienna, Austria** IAU Ph.D. Prize Talk: The First Black Holes in the Cosmic Dark Ages
July 2018	**The Early Growth of Supermassive Black Holes, Sexten, Italy** A Multi-Wavelength View onto the First Black Hole Seeds
November 2017	**Workshop: "Titans of the Early Universe", Prato, Italy** The Growth of the First Black Holes

▬▬ Invited Talks

January 2026	Talk, Sesto XI: "CSI Sesto: Cosmology Scene Investigation in Sesto. Joining Efforts to Solve JWST Mysteries in the Distant Universe", Sexten (Italy)
January 2026	Talk, Sesto XI: "The growth of galaxies in the Early Universe", Sexten (Italy)
September 2025	Lesson Series, Cambridge Center for Adult Education, Cambridge (MA)
August 2025	Talk, 2025 Santa Cruz Galaxy Meeting, Santa Cruz (CA)
April 2025	Colloquium, University of Texas at San Antonio, San Antonio (TX)
April 2025	Galaxy Lunch Talk, Yale University, New Haven (CT)

January 2025	Talk, JWST High-z Meeting, Center for Astrophysics	Harvard & Smithsonian, Cambridge, MA
January 2025	Talk, Sexten Winter Workshop: 'The Growth of Galaxies in the Early Universe – X: the Physics of Early Galaxies", Sexten, Italy
January 2025	Special Session of the Working Group on International Students and Scholars, AAS 245, National Harbor (MD), USA
January 2025	PhysPAG Meeting at AAS 245, National Harbor (MD), USA
January 2025	Special Session talk, AAS 245, National Harbor (MD), USA
December 2024	Talk, Johns Hopkins University, Baltimore (MD)
December 2024	Colloquium, Hebrew University of Jerusalem, virtual
October 2024	Colloquium, Georgia Tech, Atlanta (GA)
October 2024	Colloquium, University of Texas at Austin, Austin (TX)
October 2024	Colloquium, NYU, New York City (NY)
September 2024	Colloquium, Colby College, Waterville (ME)
September 2024	Talk, NASA/Goddard Space Flight Center AGN Seminar, GSFC, Greenbelt (MD)
September 2024	Discussion Leader "To B or not to B, where B=Blackhole", KITP, Santa Barbara (CA)
July 2024	TANDEM Seminary w/t Erandi Chavez, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA
April 2024	Talk, NASA Habitable Worlds Observatory AGN Working Group, virtual
March 2024	Astrophysics Colloquium, UCLA, Los Angeles (CA), USA
November 2023	Tufts Astro Colloquium, Tufts University, Medford (MA), USA
October 2023	ASD Colloquium, NASA Goddard Space Flight Center, Greenbelt (MD), USA
June 2023	Colloquium, Scuola Normale Superiore, Pisa, Italy
June 2023	Talk, ATA Frascati, Rome, Italy
May 2023	Talk, MIT, Erin Kara's Group Meeting, Cambridge (MA), USA
April 2023	Colloquium, KITP Stanford, Stanford (CA), USA
March 2023	Special Session talk, AAS HEAD 20, Waikoloa Village (HI), USA
December 2022	Talk, ITC Luncheon, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA
November 2022	Talk, Theory Seminar Series, CIERA, Northwestern University, Evanston (IL), USA
August 2022	Colloquium, University of Miami, Miami (FL), USA
August 2022	Talk, AXIS Seminar Series, virtual
June 2022	Talk, AXIS Working Group Meeting, virtual
May 2022	Speaker at the "The Night of Ideas", Boston (MA), USA
March 2022	Special Session talk, AAS HEAD 19, Pittsburgh (VA), USA
November 2021	Talk, UConn, Storrs (CT), USA

October 2021	Talk, Institute for Advanced Studies, Princeton (NJ), USA
September 2021	Speaker at the "Futurological Congress", Bolzano, Italy
September 2021	Colloquium, INAF Brera, Milan, Italy
November 2020	Colloquium, SISSA, Trieste, Italy
October 2020	AAS HEAD division talk, virtual
October 2020	HEAD Talk, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA
September 2020	Colloquium, NRC Herzberg Astronomy & Astrophysics, virtual
September 2020	Colloquium, University of British Columbia, virtual
September 2020	Talk, "Origin, growth, and feedback of black holes in dwarf galaxies", virtual conference
June 2020	Press conference and Science talk, AAS 236th meeting, virtual
January 2020	Colloquium, ITC, Harvard University, Cambridge (MA), USA
October 2019	Talk, AHA Workshop, University of Miami, Miami (FL), USA
March 2019	Colloquium, University of Connecticut, Storrs, (CT), USA
March 2019	Colloquium, Black Hole Initiative (Harvard University), Cambridge (MA), USA
March 2019	HEAD Talk, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA
November 2018	Talk, ITC, Center for Astrophysics	Harvard & Smithsonian, Cambdridge (MA), USA
October 2018	Colloquium, Dartmouth College, Hanover (NH), USA
March 2018	Physics Colloquium, University of Miami, Miami (FL), USA
March 2018	CosmoClub Talk, UC Santa Cruz, Santa Cruz (CA), USA
October 2017	Colloquium, Yale Astronomy Department, New Haven (CT), USA
October 2017	Colloquium, INAF - OAR, Astronomical Observatory of Rome, Italy
August 2017	Talk, HEAD Meeting 2017, Sun Valley (ID), USA
June 2017	Talk, Yale Society of Physics Student, New Haven (CT), USA
June 2017	Talk, Elusive AGN in the Next Era, George Mason University, Fairfax (VA), USA
March 2017	Talk, Science with the Hubble and James Webb Space Telescopes, Venice, Italy
December 2016	Colloquium, The First Black Holes, CCA (Simons Foundation), NYC (NY), USA
July 2016	Colloquium, Kapteyn Astronomical Institute, Groningen, The Netherlands
March 2016	Talk, Columbia University, NYC (NY), USA
February 2016	Talk, Yale University, New Haven (CT), USA
February 2016	Talk, ITC, Center for Astrophysics	Harvard & Smithsonian, Cambdridge (MA), USA
January 2016	Colloquium MPA Garching, Germany

October 2015	Talk, X DAVID International Workshop, Scuola Normale Superiore, Italy
February 2015	Talk, IAP Paris, France
October 2014	Talk, IX DAVID International Workshop, Scuola Normale Superiore, Italy
October 2013	Talk, VIII DAVID International Workshop, Scuola Normale Superiore, Italy

Contributed Talks

December 2025	Talk, "Accretion History of AGN", AHA conference 2025, Miami, FL, USA
December 2025	Talk, "Highly Accreting Supermassive Black Holes Across all Cosmic Times" conference, Santiago, Chile
November 2025	Talk, Narayan Group Meeting, Cambridge, MA, USA
July 2025	Talk, "Towards the Habitable Worlds Observatory: Visionary Science and Transformational Technology" conference, Washington, DC, USA
June 2025	Talk, "Vasto Accretion Meeting" conference, Vasto, Italy
May 2025	Talk, "Cosmic Frontier Center" conference, UT Austin, Austin (TX), USA
May 2025	Talk, "Unveiling massive black hole evolution with gravitational waves and light" conference, Paris, France
May 2025	Talk, AXIS Science Team Meeting, Annapolis (MD), USA
January 2025	Talk, ITC Luncheon, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA
January 2025	Talk, AAS 245, National Harbor (MD), USA
December 2024	Talk, "25 Years of Science with Chandra" conference, Boston (MA), USA
November 2024	Talk, JSI Meeting, Baltimore (MD), USA
November 2024	Talk, AGN SWG HWO, virtual
September 2024	Talk, "To B or Not to B, Where B=Blackhole", Hernquist group meeting, Cambridge (MA), USA
August 2024	Talk, "Cosmic Dawn Revealed by JWST: The Physics of the First Stars, Galaxies, and Black Holes" Conference, KITP, Santa Barbara (CA), USA
June 2024	Talk, "Celebrating 50 Years of Narayan" Conference, Boston (MA), USA
June 2024	Talk, AAS 244, Madison (WI), USA
May 2024	Talk, Review on Overmassive Black Holes, Hernquist group meeting, Cambridge (MA), USA
May 2024	Talk, "First Stars VII in NYC" Conference, NYC (NY), USA
April 2024	Talk, "Massive Black Holes in the First Billion Years" Conference, Kinsale, Ireland
January 2024	Talk, AAS 243, New Orleans (LA), USA
December 2023	Talk, "Accretion History of AGN (AHA)" Conference, Miami (FL), USA
November 2023	Talk, ITC Luncheon, Center for Astrophysics	Harvard & Smithsonian, Cambridge (MA), USA

November 2023	Talk, Hernquist Group, Center for Astrophysics | Harvard & Smithsonian, Cambridge (MA), USA
September 2023	Talk, "The First Year of JWST Science Conference", Baltimore (MD), USA
June 2023	Talk, AAS 242, Albuquerque (NM), USA
May 2023	Talk, NERQUAM Conference 2023, Kingston (RI), USA
March 2023	Talk, eXtreme Black Holes, Aspen Winter Workshop, Aspen (CO), USA
September 2022	Talk, VLA Sky Survey in the Multiwavelength Spotlight, Socorro (NM), USA
June 2022	Talk, AAS Summer Meeting 2022, Pasadena (CA), USA
May 2022	Talk, "IMBH: New Science from Stellar Evolution to Cosmology" workshop, Puerto Rico, USA
December 2021	Talk, BLAST Workshop 2021, virtual
January 2019	Talk, AAS Winter Meeting 2019, Seattle (WA), USA
March 2018	Talk, AAS HEAD Meeting 2018, Rosemont (IL), USA
June 2015	Talk, EWASS 2015 Conference, Spain
September 2014	Talk, Meeting of the Italian Physical Society, Italy
June 2014	Talk, Chalonge Meudon Workshop 2014 - Meudon Observatory, France

Public Outreach

Additional details and links about my outreach activities can be found on the Outreach page of my professional website.

since 2022	**Regular science writer for Scientific American.** "Why Do Astronomers Seek the Most Distant Galaxies?" op-ed; "How Taking Pictures of Nothing Changes Astronomy" op-ed also published in the December 2022 printed edition of Sci Am; "Invisible Numbers Are the Most Beautiful Part of Every 'Space' Image" op-ed; "JWST's Smashing Success Shifts Focus to Astronomy's Blind Spots" op-ed; "JWST Finds Strange Harmony in Early Galaxies and Black Holes" op-ed; "JWST's 'Little Red Dots' Offer Astronomers the Universe's Weirdest Puzzle" op-ed.
2024	**Writer of an invited feature article for Sky & Telescope.** Appeared in the May 2024 printed edition, it covers the first year of discoveries by JWST in the field of high-redshift black holes. Title: Distant Lights in the Darkness.
2024	**Writer for The Conversation** covering the Little Red Dots. Title: Tiny, compact galaxies are masters of disguise in the distant universe — searching for the secrets behind the Little Red Dots. At publication, it rapidly became the second most-read article of the week.

since 2018	**Educator for 11 TED-Ed videos about science, many of them related to black holes**. For each video, I directed a team of ~ 10 people (animators, scriptwriters, narrators). Each video was viewed $\sim 200,000$ times on publication day, many of which have been translated into 25+ languages. Overall, the 11 published videos have 20+ million views. This effort was covered by an article on the Harvard Gazette.
2023	**Science Editor for the book "Black Hole Aesthetics"**, by Lynn Gamwell
2022	**Guest for the podcast "Masters of Scale"** with Reid Hoffman, aired December 6, 2022.
2022	**Writer contributor** for the book "Shaping the Future: Sustainability and Technology at the Crossroads of Arts and Science", published by Graffeg (2023).
2021–2022	**Science Advisor** for the Black Hole Symphony show, produced by the Boston Museum of Science.
2019–2024	**Manager of public outreach** for the Black Hole Initiative at Harvard.
2018	**Development of the Black Hole Calculator:** online tool that provides a convenient summary of the properties of a black hole given its mass and spin. The calculator is a valuable tool for research and teaching, and it is used by a daily average of ~ 100 people worldwide.
2019	**Guest for a CBS/ZDNET show**: What we know about the black hole information paradox.
2019	**Writer of one essay for the "Libro dell'Anno 2019" by Treccani** about the EHT image of the black hole in M87. Treccani is among the most prestigious encyclopedic institutions worldwide.
2018	**Astronomy on Tap — New Haven** with the talk "The Hunt for the First Black Holes in the Universe".
2016–2017	**Multiple invitations as a guest for the radio program "Aula 40"** on air from the National Research Center (CNR) in Pisa.
2013–2016	**Organizer of the Cosmology outreach program** for the Scuola Normale Superiore, Italy.
2013–2017	**Co-organizer of the local astronomy outreach events** for the "Night of the Researchers" in Italy.
2011	**Science Editor for the book "Cielo Tricolore":** this book celebrated the 150th anniversary of Italy and was sent to the President of the Italian Republic.
since 2005	**Presented 100+ public outreach talks**, both in-person (Italy, USA, Netherlands, Peru, Spain) and virtual.
2005	**Author of a section of the book "Astronomia in rete: gli studenti fanno vedere le stelle"** published by the Italian Ministry of Education, University and Research. The section described a method to measure the distance of close-by astronomical objects, easily implementable in schools.

Press Coverage

Additional details and links about the press coverage of my research can be found on the Press Coverage page of my professional website.

August 2025 **Coverage of a new model to explain the origin of the Little Red Dots**, revealed by JWST in the very distant Universe. The news was covered by many outlets, including the Harvard Gazette, ScienceDaily, Universe Today, Sky & Telescope, Phys.org.

January 2024 **Extensive coverage of the discovery that black holes detected by JWST in the faraway Universe are significantly overmassive**. Among others, it was covered by the Sky & Telescope, Big Think, and phys.org. See also the beautiful animation created for the press release.

April 2022 **Extensive coverage of the discovery of the most distant galaxy candidates ever found and their physical interpretation**. According to an analysis by the CfA press office, the news reached 1.5 billion readers worldwide. Among others, it was covered by the New York Times, Reuters, Boston Globe.

June 2020 **Coverage of a new model to describe how black holes grow across cosmic time**, which was presented at a press conference during the 236th meeting of the AAS. The news was covered by Sky & Telescope, Phys.org, Universe Today, IFLScience magazine, Cosmos Magazine, Repubblica, and Media INAF.

January 2019 **Coverage of the discovery of the first strongly lensed quasar at z > 6, for which I was a collaborator, along with its physical interpretation and consequences for the broader populations of high-z quasars**. The news was covered by Yale University, Keck Observatory, Hubble Space Telescope, and ESA press releases. Media outlets, such as USA Today, Space.com, Astronomy.com, Discover magazine, Science Daily, Sky & Telescope, Cosmos Magazine, WSHU Public Radio, Sci-News, ScienMag, EarthSky, Repubblica and Messaggero, among many other outlets.

May 2016 **Extensive coverage of the discovery of the first Direct Collapse Black Hole candidates**. The discovery was presented by a NASA press release and featured on ABC News, Daily Mail, WIRED, Space.com, CBS, ESA, Chandra website, Repubblica, Corriere della Sera, Messaggero, among many others.

since 2016 **Routinely interviewed by media outlets to comment on recent discoveries in astronomy**, mostly regarding black holes. Examples of recent interviews: Discover Magazine, Yale Daily News, Pop Sci, Zeppelin, Repubblica.

Long-Term Visits

Jan–Mar 2016 **Yale University — Department of Astronomy**, *New Haven (CT)*, USA.
Supervisor: Prof. Priyamvada Natarajan, Research topic: Black hole outflows

Jan–Apr 2015 **Institut d'Astrophysique de Paris (IAP)**, *Paris*, France.
Supervisor: Prof. Marta Volonteri, Research topic: Black hole seeds growth

Jul–Sept 2012 **Center for Astrophysics | Harvard & Smithsonian**, *Cambridge (MA)*, USA.
Supervisor: Prof. Lars Hernquist, Research topic: Planetary dynamics

Academic References

- Professor Abraham Loeb, Harvard University (aloeb@cfa.harvard.edu)
- Professor Lars Hernquist, Harvard University (lhernquist@cfa.harvard.edu)
- Professor Ramesh Narayan, Harvard University (rnarayan@cfa.harvard.edu)
- Professor Priyamvada Natarajan, Yale University (priyamvada.natarajan@yale.edu)
- Professor Tiziana Di Matteo, Carnegie Mellon University (tiziana@phys.cmu.edu)
- Professor Xiaohui Fan, University of Arizona (xfan@email.arizona.edu)
- Professor Nico Cappelluti, University of Miami (ncappelluti@miami.edu)
- Professor Andrea Ferrara, Scuola Normale Superiore (andrea.ferrara@sns.it)
- Professor Andrei Mesinger, Scuola Normale Superiore (andrei.mesinger@sns.it)

Peer-Reviewed Publication List

Note: This list includes papers accepted or submitted to refereed journals. For co-authored papers, when more than 10 authors are present, only the first and the total number of authors are indicated. A star symbol ($\star$) indicates directly supervised student-led papers.

1. Davis, K., [...] **Pacucci F.**, et al., (31 authors) *Extreme Emission Line Galaxies in CEERS Are Powered by Star Formation, not AGN*, 2026, submitted to ApJ

2. McGrath, E. J., [...] **Pacucci F.**, et al., (45 authors) *A Morphology Catalog of Galaxies in CEERS: Evolution in the Size and Color Gradients of Galaxies Since Cosmic Dawn*, 2026, ApJ Letters, 999, L6

3. Han, J. J., [...] **Pacucci F.**, et al., (96 authors) *A Path to an All-Sky Survey with Roman*, 2026, white paper

4. Nguyen, D. D., [...] **Pacucci F.**, et al., (9 authors) *Dynamical Evidence for a Billion Solar Mass Black Hole in Galaxy NGC 4061 from ALMA 12CO(2-1) Kinematics*, 2026, submitted to ApJ

5. **Pacucci F.**, Ferrara A. & Kocevski, D. D. *The Little Red Dots Are Direct Collapse Black Holes*, 2026, submitted to Nature

6. $\star$ Guia C. F. & **Pacucci F.**, *Radio Constraints Disfavor Little Red Dots as Scaled-down Super-Eddington Quasars*, 2025, Research Notes of the AAS, 9 355

7. Bisigello, L., [...] **Pacucci F.**, et al., (28 authors) *HELM's deep: Highly Extincted Low-Mass galaxies seen by JWST*, 2025, submitted to A&A

8. LaChance, P., [...] **Pacucci F.**, et al., (11 authors) *From ASTRID to BRAHMA – The role of overmassive black holes in little red dots in cosmological simulations*, 2025, submitted to ApJ

9. Brooks, M., [...] **Pacucci F.**, et al., (22 authors) *Beyond the Monsters: A More Complete Census of Black Hole Activity at Cosmic Dawn*, 2025, submitted to ApJ

10. Scoggins, M. T., Haiman, Z., **Pacucci F.**, *Heavy black hole seed survivors in dwarf galaxies: a case study of Leo I*, 2025, submitted to MNRAS

11. Koss, M., [...] **Pacucci F.**, et al., (398 authors) *The Advanced X-ray Imaging Satellite Community Science Book*, 2025

12. Cox, I. G., [...] **Pacucci F.**, et al., (38 authors) *The CEERS Photometric and Physical Parameter Catalog*, 2025, submitted to ApJ

13. Jones, B. L., [...] **Pacucci F.**, et al., (21 authors) *The $M_{\mathrm{BH}} - M_\star$ Relationship at $3 < z < 7$: Big Black Holes in Little Red Dots*, 2025, submitted to ApJ

14. Perry, M. N., [...] **Pacucci F.**, et al., (18 authors) *The Prevalence of Bursty Star Formation in Low-Mass Galaxies at $z = 1 - 7$ from Hα-to-UV Diagnostics*, 2025, ApJ, Volume 994, Issue 1, id.14, 11 pp.

15. Merlin, E., [...] **Pacucci F.**, et al., (20 authors) *Witnessing Downsizing in the Making: Quiescent and Breathing Galaxies at the Dawn of the Universe*, 2025, The Open Journal of Astrophysics, Volume 8

16. **Pacucci F.**, Hernquist L., Fujii M. *Little Red Dots Are Nurseries of Massive Black Holes*, 2025, ApJ, Volume 994, Issue 1, id.40, 9 pp.

17. Ronayne, K., [...] **Pacucci F.**, et al., (15 authors) *MEGA: Spectrophotometric SED Fitting of Little Red Dots Detected in JWST MIRI*, 2025, submitted to ApJ

18. Gandolfi, G., [...] **Pacucci F.**, et al., (37 authors) *Mysteries of Capotauro - investigating the puzzling nature of an extreme F356W-dropout*, 2025, submitted to A&A

19. Ngo, H. N., [...] **Pacucci F.**, et al., (12 authors) *Revisiting the supermassive black hole mass of NGC 7052 using high spatial resolution molecular gas observed with ALMA*, 2025, accepted on ApJ

20. Ighina, L., [...] **Pacucci F.**, et al., (22 authors) *X-ray Investigation of Possible Super-Eddington Accretion in a Radio-Loud Quasar at $z = 6.13$*, 2025, accepted for publication on ApJ Letters

21. Rinaldi, P., [...] **Pacucci F.**, et al., (26 authors) *Beyond the Dot: an LRD-like nucleus at the Heart of an IR-Bright Galaxy and its implications for high-redshift LRDs*, 2025, submitted to ApJ

22. Morales, A. M., [...] **Pacucci F.**, et al., (24 authors) *Testing Photometric Techniques for Measuring the Rest-Frame UV Spectral Slope Against JWST PRISM Spectroscopy*, 2025, ApJ, Volume 994, Issue 2, id.212, 10 pp.

23. Billand, JB., [...] **Pacucci F.**, et al., (19 authors) *Investigating the Growth of Little Red Dot Descendants at z<4 with the JWST*, 2025, submitted to A&A

24. **Pacucci F.**, *Exploring the Quiescent Black Hole Population of Nearby Dwarf Galaxies with HWO*, 2025, to be submitted to PASP conference proceedings

25. **Pacucci F.** & Loeb A., *Cosmic Outliers: Low-Spin Halos Explain the Abundance, Compactness, and Redshift Evolution of the Little Red Dots*, 2025, ApJ Letters, Volume 989, Number 2

26. Hamblin, K., [...] **Pacucci F.**, et al., (20 authors), *AGNBoost: A Machine Learning Approach to AGN Identification with JWST/NIRCam+MIRI Colors and Photometry*, 2025, submitted to ApJ

27. LaChance, P., Croft, R.A.C., Di Matteo, T., Zhou, Y., **Pacucci, F.**, Ni, Y., Chen, N., Bird, S., *The Properties of Little Red Dots Galaxies in the Astrid Simulation*, 2025, submitted to OJA

28. Papovich, C., [...] **Pacucci F.**, et al., (30 authors), *Galaxies in the Epoch of Reionization Are All Bark and No Bite − Plenty of Ionizing Photons, Low Escape Fractions*, 2025, submitted to ApJ

29. Géron, T., [...] **Pacucci F.**, et al., (25 authors), *Galaxy Zoo CEERS: Bar fractions up to z 4*, 2025, ApJ, Volume 987, Issue 1, id.74, 19 pp.

30. Castellano, M., [...] **Pacucci F.**, et al., (48 authors), *Pushing JWST to the extremes: search and scrutiny of bright galaxy candidates at z≃15-30*, 2025, A&A, Volume 704, id.A158, 24 pp.

31. Smethurst, R. J., [...] **Pacucci F.**, et al., (24 authors), *Galaxy Zoo JWST: Up to 75% of discs are featureless at 3<z<7*, 2025, MNRAS, Volume 539, Issue 2, pp. 1359-1371, 13 pp.

32. Backhaus, Bren E., [...] **Pacucci F.**, et al., (20 authors), *Emission-Line Diagnostics at z>4: [OIII]λ4363/Hγ*, 2025, ApJ, Volume 994, Issue 1, id.125, 13 pp.

33. Huertas-Company, M., [...] **Pacucci F.**, et al., (32 authors), *COSMOS-Web: The emergence of the Hubble Sequence*, 2025, A&A, Volume 704, id.A94, 20 pp.

34. Gandolfi, G., [...] **Pacucci F.**, et al., (44 authors), *Ultra High-Redshift or Closer-by, Dust-Obscured Galaxies? Deciphering the Nature of Faint, Previously Missed F200W-Dropouts in CEERS*, 2025,

submitted to A&A

35. Mallick, L., Pinto, C., Tomsick, J., Markowitz, A., Fabian, A., Safi-Harb, S., Steiner, J., **Pacucci, F.**, Alston, W, *Constraining Disk-to-Corona Power Transfer Fraction, Soft X-ray Excess Origin, and Black Hole Spin Population of Type-1 AGN across Mass Scales*, 2025, submitted to ApJS

36. Mascia, S., [...] **Pacucci F.**, et al., (31 authors), *Little impact of mergers and galaxy morphology on the production and escape of ionizing photons in the early Universe*, 2025, submitted to A&A

37. Finkelstein, S. L., [...] **Pacucci F.**, et al., (99 authors), *The Cosmic Evolution Early Release Science Survey (CEERS)*, 2025, ApJ Letters, Volume 983, Issue 1, id.L4, 29 pp.

38. Laha, S., [...] **Pacucci F.**, et al., (37 authors), *Multi-wavelength observations of a jet launch in real time from the post-changing-look Active Galaxy 1ES 1927+654*, 2025, ApJ, Volume 981, Issue 2, id.125, 20 pp.

39. Llerena, D., [...] **Pacucci F.**, et al., (29 authors), *The ionizing photon production efficiency of star-forming galaxies at $z \sim 4 - 10$*, 2025, A&A, Volume 698, id.A302, 15 pp.

40. Dottorini, D., [...] **Pacucci F.**, et al., (26 authors), *Evolution of the UV slope of galaxies at cosmic morning (z > 4): the properties of extremely blue galaxies*, 2025, A&A, Volume 698, id.A234, 13 pp.

41. Rahman, T., [...] **Pacucci F.**, et al., (7 authors), *Spatially Resolved Stellar Populations of z = 3 - 6 Lyman-alpha-emitting Galaxies with CEERS JWST NIRCam Imaging*, 2024, Research Notes of the AAS, Volume 8, Issue 12, id.297

42. Cheng, Y., [...] **Pacucci F.**, et al., (24 authors), *Unveiling the Dark Side of UV/Optical Bright Galaxies: Optically Thick Dust Absorption*, 2025, ApJ, Volume 979, Issue 1, id.71, 19 pp.

43. Bisigello, L., [...] **Pacucci F.**, et al., (27 authors), *Spectroscopic confirmation of a dust-obscured, metal-rich dwarf galaxy at $z \sim 5$*, 2025, A&A, Volume 693, id.L18, 9 pp.

44. ⋆ La Torre V. & **Pacucci F.**, *HOLESOM: Constraining the Properties of Slowly-Accreting Massive Black Holes with Self-Organizing Maps*, 2025, ApJ, Volume 986, Number 1

45. Lambrides, E., [...] **Pacucci F.**, et al., (26 authors), *The Case For Super-Eddington Accretion: Connecting Weak X-ray and UV Line Emission During the First Gyr of Cosmic Time*, 2024, submitted to Nature Astronomy

46. Taylor, A. J., [...] **Pacucci F.**, et al., (51 authors), *Broad-Line AGN at $3.5 < z < 6$: The Black Hole Mass Function and a Connection with Little Red Dots*, 2025, ApJ, Volume 986, Issue 2, id.165, 23 pp.

47. Guo, Y., [...] **Pacucci F.**, et al., (29 authors), *The Abundance and Properties of Barred Galaxies out to $z \sim 4$ Using JWST CEERS Data*, 2025, ApJ, Volume 985, Issue 2, id.181, 23 pp.

48. ⋆ Guia C. F., **Pacucci F.**, Kocevski D., *Sizes and Stellar Masses of the Little Red Dots Imply Immense Stellar Densities*, 2024, Research Notes of the AAS, 8 207

49. **Pacucci F.**, Narayan R., *Mildly Super-Eddington Accretion Onto Slowly-Spinning Black Holes Explains the X-Ray Weakness of the Little Red Dots*, 2024, ApJ, Volume 976, Number 1

50. ⋆ Durodola E., **Pacucci F.**, Hickox R. C., *Exploring the AGN Fraction of a Sample of JWST's Little Red Dots at $5 < z < 8$: Overmassive Black Holes Are Strongly Favored*, 2025, ApJ, Volume 985, Issue 2, id.169, 11 pp.

51. Cappelluti N., **Pacucci F.**, Hasinger G., *Constraining Wind-Driven Accretion Onto Gaia BH3 With Chandra*, 2024, ApJ, Volume 973, Issue 2, id.75, 7 pp.

52. ⋆ Weller E. J., **Pacucci F.**, Ni Y., Hernquist L., Park M., *Discrepancies Between JWST Observations and Simulations of Quenched Massive Galaxies at $z > 3$: A Comparative Study With IllustrisTNG and ASTRID*, 2025, ApJ, Volume 979, Issue 2, id.181, 12 pp.

53. ⋆ Guia C. F. & **Pacucci F.**, *No Significant Redshift Evolution in the Intrinsic Scatter of the $M_\bullet - M_\star$ Relation for Overmassive Black Holes*, 2024, Research Notes of the AAS, 8 153

54. **Pacucci F.**, Loeb A., Juodžbalis I., *The Host Galaxy of a Dormant, Overmassive Black Hole at $z = 6.7$ May Be Restarting Star Formation*, 2024, Research Notes of the AAS, 8 105

55. Seille, L. M., [...] **Pacucci F.**, et al., (18 authors), *Physical properties of strong 1 < z < 3 Balmer and Paschen lines emitters observed with JWST*, 2024, A&A, Volume 689, id.A102, 18 pp.

56. Mezcua M., **Pacucci F.**, Suh H., Siudek M., Natarajan P., *Overmassive black holes at cosmic noon: linking the local and the high-redshift Universe*, 2024, ApJ Letters, Volume 966, Number 2

57. Kocevski, D. D., [...] **Pacucci F.**, et al., (57 authors), *The Rise of Faint, Red AGN at $z > 4$: A Sample of Little Red Dots in the JWST Extragalactic Legacy Fields*, 2025, ApJ, Volume 986, Issue 2, id.126, 30 pp.

58. Calabrò, A., [...] **Pacucci F.**, et al., (30 authors), *The evolution of the SFR and Σ_{SFR} of galaxies in cosmic morning ($4 < z < 10$)*, 2024, A&A, Volume 690, id.A290, 18 pp.

59. **Pacucci F.** & Loeb A., *The Redshift Evolution of the $M_\bullet - M_\star$ Relation for JWST's Supermassive Black Holes at $z > 4$*, 2024, ApJ, Volume 964, Number 2

60. Cappelluti N., Foord A., Marchesi S., **Pacucci F.**, et al., (10 authors), *Surveying the onset and evolution of supermassive black holes at high-z with AXIS*, 2023, AXIS White Paper, published in Universe

61. **Pacucci F.**, Seepaul B., Ni Y., Cappelluti N., Foord A., *Detecting Wandering Intermediate-Mass Black Holes with AXIS in the Milky Way and Local Massive Galaxies*, 2023, AXIS White Paper, published in Universe

62. Foord A., Cappelluti N., Liu T., Volonteri M., Habouzit M., **Pacucci F.**, et al., (11 authors), *Tracking SMBH mergers from kpc to sub-pc scales with AXIS*, 2023, AXIS White Paper, published in Universe

63. Gallo E., Hodges-Kluck E., Treu T., Baldassare V., Seth A., Greene J., **Pacucci F.**, et al., (10 authors), *The black hole occupation fraction of local dwarf galaxies with AXIS*, 2023, AXIS White Paper, published in Universe

64. Reynolds C. S., [...] **Pacucci F.**, et al., (43 authors), *Overview of the Advanced X-ray Imaging Satellite (AXIS)*, 2023, Published in Proceedings of SPIE Optics & Photonics 2023, San Diego

65. Fragione G. & **Pacucci F.**, *Constraining the Properties of Black Hole Seeds from the Farthest Quasars*, 2023, ApJ Letters, Volume 958, Issue 2, id.L24, 6 pp.

66. **Pacucci F.**, Nguyen B., Carniani S., Maiolino R., Fan X., *JWST CEERS & JADES Active Galaxies at $z = 4 - 7$ Violate the Local $M_\bullet - M_\star$ Relation at $> 3\sigma$: Implications for Low-Mass Black Holes and Seeding Models*, 2023, ApJ Letters, Volume 957, Number 1

67. **Pacucci F.**, Ni Y., Loeb A., *Extreme Tidal Stripping May Explain the Overmassive Black Hole in Leo I: a Proof of Concept*, 2023, ApJ Letters, Volume 956, Issue 2, id.L37, 6 pp.

68. Nabizadeh A., Zackrisson E., **Pacucci F.**, et al., (34 authors), *A search for high-redshift direct collapse black hole candidates in the PEARLS north ecliptic pole field*, 2024, Astronomy & Astrophysics, Volume 683, id.A58, 9 pp.

69. Natarajan P., **Pacucci F.**, Ricarte A., Bogdan A., Goulding A. D., Cappelluti N. *First Detection of an Over-Massive Black Hole Galaxy: UHZ1 − Evidence for Heavy Black Hole Seeds From Direct Collapse?*, 2024, ApJ Letters, Volume 960, Issue 1, id.L1, 7 pp.

70. Han J. J., [...] **Pacucci F.**, et al., (209 authors), *NANCY: Next-generation All-sky Near-infrared Community surveY*, 2023, Bulletin of the AAS

71. ⋆ Weller E. J., **Pacucci F.**, Natarajan P., Di Matteo T. *Over-massive Central Black Holes in the Cosmological Simulations ASTRID and Illustris TNG50*, 2023, MNRAS, Volume 522, Issue 4, pp.4963-4971

72. Jin X., [...] **Pacucci F.**, et al., (13 authors), *(Nearly) Model-Independent Constraints on the Neutral Hydrogen Fraction in the Intergalactic Medium at z 5-7 Using Dark Pixel Fractions in Ly-alpha and Ly-beta Forests*, 2023, ApJ, Volume 942, Number 59

73. **Pacucci F.** & Loeb A., *Accretion from Winds of Red Giant Branch Stars May Reveal the Super-massive Black Hole in Leo I*, 2022, ApJ Letters, Volume 940, Number 2

74. ⋆ Weller E. J., **Pacucci F.**, Ni Y., Chen N., Di Matteo T., Siwek, M., Hernquist L., *Orbital and Radiative Properties of Wandering Intermediate-Mass Black Holes in the ASTRID Simulation*, 2022, MNRAS, Volume 520, Issue 3, pp.3955-3963

75. Di Matteo T., Ni Y., Chen N., Croft R., Bird S., **Pacucci F.**, Ricarte A., Tremmel M., *A vast population of wandering and merging IMBHs at cosmic noon*, 2023, MNRAS, Volume 525, Issue 1, pp.1479-1497

76. ⋆ Lee R. Z., **Pacucci F.**, Natarajan P., Loeb A. *The Two z 13 Galaxy Candidates HD1 and HD2 Are Likely Not Lensed*, 2023, MNRAS, Volume 519, Issue 1, pp.585-593

77. ⋆ Seepaul B., **Pacucci F.**, Narayan R., *Detectability of Wandering Intermediate-Mass Black Holes in the Milky Way Galaxy from Radio to X-rays*, 2022, MNRAS, Volume 515, Issue 2, pp.2110-2120

78. Regan J. A, **Pacucci F.**, Bustamante-Rosell M. J., *Observational Signatures of Massive Black Hole Progenitor Pathways: is Leo I a Smoking Gun?*, 2023, MNRAS, Volume 518, Issue 4, pp.5997-6003

79. **Pacucci F.**, Foord A., Gordon L., Loeb A., *Lensing in the Darkness: A Bayesian Analysis of 22 Chandra Sources at z > 6 Shows No Evidence of Lensing*, 2022, MNRAS, Volume 514, Issue 2, pp.2855-2863

80. **Pacucci F.**, Dayal P., Harikane Y., Inoue A. K., Loeb A., *Are the Newly-Discovered z 13 Drop-out Sources Starburst Galaxies or Quasars?*, 2022, MNRAS Letters, Volume 514, Issue 1, pp.L6-L10

81. Koss M. J., [...] **Pacucci F.**, et al., (35 authors), *BASS. XXII. The BASS DR2 AGN Catalog and Data*, 2022, ApJ Supplement Series, Volume 261, Issue 1, id.2, 30 pp

82. Koss M. J., [...] **Pacucci F.**, et al., (27 authors), *BASS. XXI. The Data Release 2 Overview*, 2022, ApJ Supplement Series, Volume 261, Issue 1, id.1, 17 pp

83. LISA Cosmology WG, [...] **Pacucci F.**, et al., (180 authors), *Cosmology with the Laser Interferometer Space Antenna*, 2022, published in Living Reviews In Relativity, eprint arXiv:2204.05434

84. LISA Astrophysics WG, [...] **Pacucci F.**, et al., (155 authors), *Astrophysics with the Laser Interferometer Space Antenna*, 2022, published in Living Reviews In Relativity, eprint arXiv:2203.06016

85. ⋆ Weller E. J., **Pacucci F.**, Hernquist L., Bose S., *Dynamics of Intermediate-Mass Black Holes Wandering in the Milky Way Galaxy Using the Illustris TNG50 Simulation*, 2022, MNRAS, Volume 511, Issue 2, Pages 2229–2238

86. Harikane Y., [...] **Pacucci F.**, et al., (14 authors), *A Search for H-Dropout Lyman Break Galaxies at z 12-16*, 2022, ApJ, Volume 929, Issue 1, id.1, 15 pp

87. **Pacucci F.** & Loeb A., *The Search for the Farthest Quasar: Consequences for Black Hole Growth and Seed Models*, 2022, MNRAS, Volume 509, Issue 2

88. Chen H., Ricarte A., **Pacucci F.**, *Prospects to Explore High-redshift Black Hole Formation with Multi-band Gravitational Waves Observatories*, 2022, submitted to ApJ Letters, eprint arXiv:2202.04764

89. **Pacucci F.**, Mezcua M., Regan J. A., *The Active Fraction of Massive Black Holes in Dwarf Galaxies*, 2021, ApJ, Volume 920, Issue 2, id.134, 12 pp

90. Outmezguine N. J., **Pacucci F.**, Loeb A., *Detection Prospects of Local Super-Massive Black Holes Based on the Sloan-Digital Sky Survey*, 2021, submitted to MNRAS, eprint arXiv:2108.10123

91. Vagnozzi S., **Pacucci F.**, Loeb A., *Implications for the Hubble tension from the ages of the oldest astrophysical objects*, 2022, Journal of High Energy Astrophysics, Volume 36, p. 27-35

92. Sesana A., [...] **Pacucci F.**, et al., (34 authors), *Unveiling the Gravitational Universe at μ-Hz Frequencies*, 2021, Experimental Astronomy, Volume 51, Issue 3, p.1333-1383

93. Unal C., **Pacucci F.**, Loeb A., *Properties of Ultralight Bosons from Heavy Quasar Spins via Superradiance*, 2021, JCAP, Volume 2021, Issue 05, id.007, 21 pp

94. Yang J., [...] **Pacucci F.**, et al., (12 authors), *Measurements of the z ∼ 6 Intergalactic Medium Optical Depth and Transmission Spikes Using a New z > 6.3 Quasar Sample*, 2020, ApJ, Volume 904, Issue 1, id.26, 28 pp

95. Nunes R. C. & **Pacucci F.**, *Effects of the Hubble Parameter on the Cosmic Growth of the First Quasars*, 2020, MNRAS, Volume 496, Issue 1, pp.888-893

96. Whalen D. J., Surace M., Bernhardt C., Zackrisson E., **Pacucci F.**, Ziegler B., Hirschmann M., *Finding the First Quasars at Birth*, 2020, ApJ Letters, Volume 897, Issue 1, Article L16

97. **Pacucci F.** & Loeb A., *Separating Accretion and Mergers in the Cosmic Growth of Black Holes with X-ray and Gravitational Wave Observations*, 2020, ApJ, Volume 895, Issue 2, id.95, 8 pp

98. **Pacucci F.** & Loeb A., *Reality or Mirage? Observational Test and Implications for the Claimed Extremely Magnified Quasar at $z = 6.3$*, 2020, ApJ, Volume 889, Issue 1, id.52, 6 pp

99. Baer R. E., [...] **Pacucci F.**, et al., (21 authors), *BAT AGN Spectroscopic Survey – XIII. The nature of the most luminous obscured AGN in the low-redshift universe*, 2019, MNRAS, Volume 489, Issue 3, p.3073-3092

100. Li Y., Cappelluti N., Hasinger G., Arendt R. G., Kashlinsky A., **Pacucci F.**, *Spectral Properties Of Populations Behind The Coherence In Spitzer Near-Infrared And Chandra X-Ray Backgrounds*, 2019, ApJ, Volume 883, Issue 1, article id. 64, 8 pp

101. Ricarte A., **Pacucci F.**, Natarajan P., Cappelluti N., *The Clustering of Undetected High-redshift Black Holes and Their Signatures in Cosmic Backgrounds*, 2019, MNRAS, Volume 489, Issue 1, p.1006-1022

102. Haiman Z., **Pacucci F.**, et al., *Electromagnetic Window into the Dawn of Black Holes*, Astro2020, US Decadal Survey White Paper

103. Wang L., **Pacucci F.**, et al., *JWST: Probing the Epoch of Reionization with a Wide Field Time-Domain Survey*, Astro2020, US Decadal Survey White Paper

104. Fan X., **Pacucci F.**, et al., *The First Luminous Quasars and Their Host Galaxies*, Astro2020, US Decadal Survey White Paper

105. **Pacucci F.**, Baldassare V., Cappelluti N., Fan X., Ferrara A., Haiman Z., Natarajan P., Ozel F., Schneider R., Tremblay G., Urry M., Valiante R., Vikhlinin A., Volonteri M., *Detecting the Birth of Supermassive Black Holes Formed from Heavy Seeds*, Astro2020, US Decadal Survey White Paper

106. Natarajan P., **Pacucci F.**, et al., *Disentangling nature from nurture: tracing the origin of seed black holes*, Astro2020, US Decadal Survey White Paper

107. Nguyen D., [...] **Pacucci F.**, et al., (20 authors), *Improved dynamical constraints on the masses of the central black holes in nearby low-mass early-type galactic nuclei and the first black hole determination for NGC 205*, 2019, ApJ, Volume 872, Issue 1, article id. 104, 26 pp

108. **Pacucci F.** & Loeb A., *Most Lensed Quasars at $z > 6$ are Missed by Current Surveys*, 2019, ApJ Letters, Volume 870, Issue 2, Article L12

109. Fan X., [...] **Pacucci F.**, et al., (20 authors), *The Discovery of a Gravitationally Lensed Quasar at $z = 6.51$*, 2019, ApJ Letters, Volume 870, Issue 2, article id. L11, 6 pp

110. Shankar F., [...] **Pacucci F.**, et al., (12 authors), *Black hole scaling relations of active and quiescent galaxies: Addressing selection effects and constraining virial factors*, 2019, MNRAS, Volume 485, Issue 1, p.1278-1292

111. Woods T. E., [...] **Pacucci F.**, et al., (33 authors), *Titans of the Early Universe: the Prato Statement on the Origin of the First Super-Massive Black Holes*, 2019, PASA review, Volume 36, id. e027

112. **Pacucci F.**, Loeb A., Mezcua M., Martin-Navarro I., *Glimmering in the Dark: Modeling the Low-mass End of the $M_\bullet - \sigma$ Relation and of the Quasar Luminosity Function*, 2018, ApJ Letters, Volume 864, Issue 1, article id. L6, 6 pp

113. **Pacucci F.**, Natarajan P., Volonteri M., Cappelluti N., Urry C. M., *Conditions for Optimal Growth of Black Hole Seeds*, 2017, ApJ Letters, Volume 850, Issue 2, article id. 42

114. Dayal P., Choudhury T., Bromm V., **Pacucci F.**, *Warm dark matter constraints from high-z Direct Collapse Black Holes using the JWST*, 2017, MNRAS, Volume 472, Issue 4, p. 4414-4421

115. Wang L., [...] **Pacucci F.** et al., (46 authors), *A First Transients Survey with JWST: the FLARE project*, 2017, arXiv:1710.07005

116. **Pacucci F.**, Loeb A., Salvadori S., *Gravitational Wave Sources from Pop III Stars are Preferentially Located within the Cores of their Host Galaxies*, 2017, MNRAS Letters, Volume 471, Issue 1, p. L72-L76

117. **Pacucci F.**, Ferrara A., Pallottini A., Gallerani S., *The nature of the Lyman Alpha Emitter CR7: a Persisting Puzzle*, 2017, MNRAS Letters, Volume 468, Issue 1, p. L77-L81

118. Gallerani S., Fan X., Maiolino R., **Pacucci F.**, *Physical properties of the first quasars*, 2017, PASA review, Volume 34, id. e022, 19 pp

119. Natarajan P., **Pacucci F.**, Ferrara A., Agarwal B., Zackrisson E., Ricarte A., Cappelluti N., *Unveiling the first black holes with JWST: multi-wavelength spectral predictions*, 2017, ApJ, Volume 838, Issue 2, article id. 117

120. Yue B., Ferrara A., **Pacucci F.**, Omukai K., *Triggering the Formation of Direct Collapse Black Holes by their Congeners*, 2017, ApJ, Volume 838, Issue 2, article id. 111

121. Cappelluti N., [...] **Pacucci F.**, et al., (18 authors), *The Chandra COSMOS Legacy Survey: Energy Spectrum of the Cosmic X-Ray Background and Constraints on Undetected Populations*, 2017, ApJ, Volume 837, Issue 1, article id. 19, 8 pp

122. Dayal P., Choudhury T., Bromm V., **Pacucci F.**, *Reionization and Galaxy Formation in Warm Dark Matter Cosmologies*, 2017, ApJ, Volume 836, Issue 1, article id. 16, 13 pp

123. **Pacucci F.**, Natarajan P., Ferrara A., *Feedback Limits to Maximum Seed Masses of Black Holes*, 2017, ApJ Letters, Volume 835, Issue 2, article id. L36, 5 pp

124. **Pacucci F.**, Ferrara A., Grazian A., Fiore F., Giallongo E., *First Identification of Direct Collapse Black Hole Candidates in the Early Universe in CANDELS/GOODS-S*, 2016, MNRAS, Volume 459, Issue 2, p.1432-1439

125. Volonteri M., Habouzit M., **Pacucci F.**, Tremmel M., *The Evolution of High-Redshift Massive Black Holes*, 2015, Galaxies at High Redshift and Their Evolution over Cosmic Time, IAUS No. 319, 2015

126. Pallottini A., Ferrara A., **Pacucci F.**, Gallerani S., Salvadori S., Schneider R., Schaerer D., Sobral D., Matthee J., *The Brightest Lyα Emitter: Pop III or Black Hole?*, 2015, MNRAS, Volume 453, Issue 3, p. 2465-2470

127. **Pacucci F.**, Ferrara A., Volonteri M., Dubus G., *Shining in the Dark: the Spectral Evolution of the First Black Holes*, 2015, MNRAS, Volume 454, Issue 4, p. 3771-3777

128. **Pacucci F.**, Volonteri M., Ferrara A., *The Growth Efficiency of High-Redshift Black Holes*, 2015, MNRAS, Volume 452, Issue 2, p. 1922-1933

129. **Pacucci F.**, Ferrara A., Marassi S., *Gravitational Waves from Direct Collapse Black Holes Formation*, 2015, MNRAS, Volume 449, Issue 1, p. 1076-1083

130. **Pacucci F.**, Ferrara A., *Simulating the Growth of Intermediate Mass Black Holes*, 2015, MNRAS, Volume 448, Issue 1, p. 104-118

131. Dayal P., Mesinger A., **Pacucci F.**, *Early Galaxy Formation in Warm Dark Matter Cosmologies*, 2015, ApJ, Volume 806, Issue 1, article id. 67, 10 pp

132. Dayal P., Ferrara A., Dunlop J., **Pacucci F.**, *Essential Physics of Early Galaxy Formation*, 2014, MNRAS, Volume 445, Issue 3, p. 2545-2557

133. **Pacucci F.**, Mesinger A., Mineo S., Ferrara A., *The X-ray Spectra of the First Galaxies: 21 cm Signatures*, 2014, MNRAS, Volume 443, Issue 1, p. 678-686

134. **Pacucci F.**, Mesinger A., Haiman Z., *Focusing on Warm Dark Matter with Lensed High-Redshift Galaxies*, 2013, MNRAS Letters, Volume 435, Issue 1, p. L53-L57

135. **Pacucci F.**, Ferrara A., D'Onghia E., *Detectability of Free Floating Planets in Open Clusters with the James Webb Space Telescope*, 2013, ApJ Letters, Volume 778, Issue 2, article id. L42