Carlo Cannarozzo

CURRICULUM VITAE

Center for Astrophysics and Space Science, New York University Abu Dhabi
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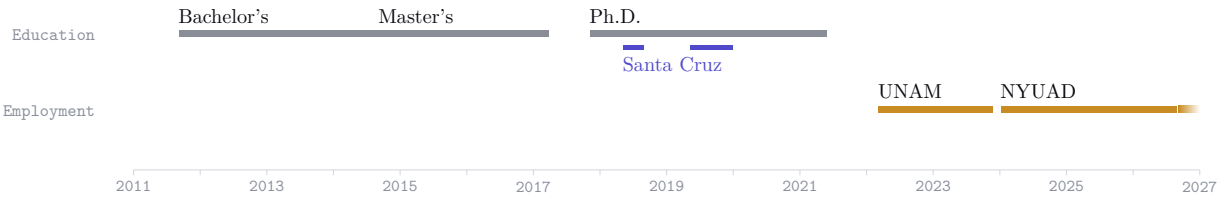
I am an expert in the formation and evolution of galaxies, in particular of **early-type galaxies**, their merger history, kinematics, scaling relations, and the **galaxy–halo connection**, exploiting state-of-the-art **statistical**, **Bayesian**, and **machine learning methods**. My research combines **cosmological simulations**, **hierarchical modeling**, **semi-empirical modeling**, and the development of large-scale scientific analysis workflows for assembly-history reconstruction, catalog generation, and data-driven inference within modern survey and simulation environments.

I am a member of the **NIHAO/HELLO** cosmological simulation team, contributing to the development of computational pipelines and scalable analysis frameworks aimed at connecting theoretical predictions with observable galaxy properties in increasingly complex, data-intensive astrophysical contexts.

I am equally invested in **teaching**, **mentoring**, **institutional and community service**, and public engagement, with extensive experience in **scientific communication**, **outreach**, and **STEAM activities** designed to foster curiosity, inclusion, and quantitative thinking across diverse audiences.



EMPLOYMENT

Sep 2026 – Present
NYUAD Associate Research Scientist
Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, UAE

Jan 2024 – Aug 2026
NYUAD Postdoctoral Associate
Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, UAE
Sponsor: *Prof. Andrea Valerio Macciò*

Mar 2022 – Nov 2023
UNAM Fellow
Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
Sponsor: *Prof. Aldo Armando Rodríguez-Puebla*

EDUCATION

Nov 2017 – May 2021
Ph.D. in Astrophysics
Alma Mater Studiorum Università di Bologna, Bologna, Italy
Ph.D. thesis defense: May 24, 2021.
Ph.D. Advisor & Co-advisor *Prof. Carlo Nipoti* and *Prof. Alessandro Sonnenfeld.*
Referees *Prof. Matthew W. Auger* and *Prof. Mariangela Bernardi.*

May 2019 – Dec 2019 • **Marie Skłodowska-Curie grant** *(during Ph.D.)*
University of California Santa Cruz, Santa Cruz, California, USA
Main collaborator *Prof. Alexie Leauthaud.*

May 2018 – Aug 2018 • **Visiting research period** *(during Ph.D.)*
University of California Santa Cruz, Santa Cruz, California, USA
Main collaborator *Prof. Alexie Leauthaud.*

Sep 2014 – Mar 2017 • **Master's Degree in Astrophysics and Cosmology,** *summa cum laude*
Alma Mater Studiorum Università di Bologna, Bologna, Italy
School of Science Master's Degree: March 10, 2017.
Thesis Advisor & Co-advisor *Prof. Lauro Moscardini* and *Prof. Federico Marulli.*
Referee *Prof. Carlo Nipoti.*

Sep 2011 – Sep 2014 • **Bachelor's Degree in Astronomy**
Alma Mater Studiorum Università di Bologna, Bologna, Italy
School of Science Bachelor's Degree: September 18, 2014.
Thesis Advisor *Prof. Daniele Dallacasa.*

GRANTS, HONORS AND RESEARCH AWARDS

Sep 12, 2025 • **The "nanoGrant" award**
Grant of merit
University Consortium of Caltanissetta & Academy of Distinction ODV, Caltanissetta, Italy

Oct 11, 2024 • **Winner of NYU GPPO Travel Award** $ 1000
Conference and Travel Award
New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

May 20, 2024 • **Winner of NYU GPPO Research Showcase**
1st prize for the category "Understanding Nature"
New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Apr 2022 – Apr 2025 • **FONDECYT Fellowship** (3-year fellowship, *declined*)
Núcleo de Astronomía, Universidad Diego Portales, Santiago, Región Metropolitana, Chile

Mar 2022 – Nov 2023 • **UNAM Fellowship** (2-year fellowship)
Instituto de Astronomía, Ciudad Universitaria, Universidad Nacional Autónoma de México, Mexico City, Mexico

May 30 – Dec 04, 2019 • **Marie Skłodowska-Curie grant** € 12000, 6 months
Horizon2020-MSCA-RISE-2017 Project 777822 GHAIA "Geometric and Harmonic Analysis with Interdisciplinary Applications"
Data Analysis & Machine Learning

SOFTWARE & TECHNICAL SKILLS

Software

BayMorph — **PYTHON Developer & Project Maintainer**
All-in-one Bayesian framework for galaxy image analysis and morphological inference (under active development; BayMorph, documentation)

MARHABA — **PYTHON Developer & Project Maintainer**
All-in-one framework designed to reconstruct, analyze, visualize, and distribute galaxy assembly histories and simulation products (under internal development; first look)

The ConCHa Project — **PYTHON Developer & Project Maintainer**
Collection of PYTHON packages for the Galaxy–Halo Connection (TheConCHaProject)

CosmoBolognaLib — **C++ co-developer**
Open Source C++/PYTHON libraries for cosmological calculations (CosmoBolognaLib)

Technical skills

Programming — **Python** (developer and maintainer of BayMorph, MARHABA and The ConCHa Project) and **C++** (co-developer of CosmoBolognaLib); **automated testing** (about 3000 tests in BayMorph), continuous integration, documentation sites, Git and GitHub.

Statistics

Hierarchical Bayesian inference with modeled selection effects; **MCMC** (emcee) and **nested sampling** with Bayesian evidence for model comparison (Nautilus, dynesty, pocoMC); **forward models** of images down to the pixels; Gaussian-process models of correlated noise (Vecchia approximations).

Machine learning & AI

Interpretable machine learning (generalized additive models, explainable boosting machines); **clustering** and **classification**; **computer vision**, with segmentation foundation models (SAM 2) tested for source identification; **agentic LLM systems**. Training: Kavli Summer Program on machine learning for large surveys and Applied Artificial Intelligence Institute (UC Santa Cruz, 2019).

Galaxy–halo modeling

Subhalo abundance matching (SHAM) and semi-empirical models of the galaxy–halo connection (The ConCHa Project); comparisons with cosmological simulations.

Computing & data

HPC clusters (NYU Abu Dhabi, Jubail) and multi-core group servers; parallel computing (CINECA Summer School, 2018); **terabyte-scale** simulation data in HDF5; **cloud** object storage (Cloudflare R2) behind public 3D web viewers.

TEACHING AND MENTORING

Teaching

Sep 10, 2025 • **The art of building elliptical galaxies via mergers**
Invited Lecturer for the *STEAM Academy Summer School 2025*
University Consortium of Caltanissetta & Academy of Distinction ODV, Caltanissetta, Italy

Aug 09 – Nov 25, 2022 • **Statistical and Numerical Methods for Astrophysics in Python**
Lecturer & Proposer of elective course of the IA-UNAM Master's program
Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico

Feb 02–11, 2022 • **Python, we have a problem (or more than one...)**
Lecturer & Organizer
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA (Ph.D. school)

Mentoring & Supervision

2024-Present • **Leen Alrawas**
PhD Student, New York University Abu Dhabi
"The morphological evolution in the HELLO cosmological simulations"
"Feedback driven interactions between dark and luminous matter to explain tight galaxy scaling relations"

2025-2026 • **Sarah Were**
Undergraduate Capstone Student, New York University Abu Dhabi
"Evolution of Satellite Mass Functions in HELLO Cosmological Simulations"

2025-2026 • **Raid Thabit**
Undergraduate Capstone Student, New York University Abu Dhabi
"Analyzing the Evolution of Metallicity in Cosmological Simulations at High Redshift"

2024-2025 • **Dr. Stefan Waterval**
Former PhD Student, New York University Abu Dhabi
"Gas accretion at high redshift: Cold Flows all the way"

ORGANIZATION & LEADERSHIP

Organizations of conferences, workshops, and events

Mar 22–26, 2027 • **Lighting up the Dark — Understanding Dark Matter from Particles to Galaxies** link
Proposer & Chair – SOC & LOC Member – Poster & Logo Designer
(co-chair: *Andrea Macciò*)
Hotel Bad Moos, Sexten Center for Astrophysics Riccardo Giacconi, Sexten, Italy

Jan 12–16, 2026 • **Cosmic Collisions 2026** link
SOC & LOC Member – Poster & Logo Designer
Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Jun 16–20, 2025 • **Dancing in the Dark: When Galaxies Shape Galaxies** link
Proposer & Chair – SOC & LOC Member – Poster & Logo Designer
Haus Sexten, Sexten Center for Astrophysics Riccardo Giacconi, Sexten, Italy

Jul 10-14, 2023 • **The importance of relations in galaxy evolution: linking observations and theory in the Big Data era** link
Proposer & Chair – SOC & LOC Member – Poster & Logo Designer
(co-chairs: *Mireia Montes & Salvatore Quai*)
Special Session SS19, European Astronomical Society Annual Meeting 2023 (EAS2023), Kraków, Poland

Feb 02-11, 2022 • **Python, we have a problem (or more than one...)**
Lecturer & Organizer (in collaboration with *Dr. Raffaele Pascale*)
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA (Ph.D. school)

Service & Panels

2023-Present • **Referee for *Astrophysical Journal*, *Astronomy & Astrophysics*, *New Astronomy Elsevier***

May-Jun 2024 • **HST Cycle 32 *"Galaxies"* Panel**
Virtual Panelist for Medium and Small Proposals
Space Telescope Science Institute, Baltimore, Maryland, USA

Jul-Aug 2023 • **HST Cycle 31 *"Galaxies"* Panel**
Virtual Panelist for Medium and Small Proposals
Space Telescope Science Institute, Baltimore, Maryland, USA

Sep 2022 - Nov 2023 • **Management of internal and external communications and posters 2022–2023**
Manager
Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico

Aug 2022 - Nov 2023 • **IA-UNAM Journal Club 2022–2023**
Proposer & Organizer
Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico

SCIENTIFIC EXPERIENCES

Conferences & seminars

Mar 23-27, 2026 ○	Contributed Talk	*Towards the Full Bloom of First Star, Galaxy, and Black Hole Formation Exploration: JWST + Multi-Facility Observations and Theory for Future Programs* (link) Tokyo, Japan
Mar 02-06, 2026 ○	Contributed Talk	*The End of Star Formation* (link) Center for AstroPhysical Surveys NCSA, University of Illinois, USA
Jan 12-16, 2026 ○	Contributed Talk	*Cosmic Collisions Conference 2026* (link) Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates
Nov 17-27, 2025 •	**Invited Seminar**	*International Workshop – Galaxy and SMBH formation, growth, and co-evolution* (Invitation-only meeting, link) Kathmandu and Langtang Valley, Nepal
Oct 26, 2025 •	**Invited Seminar**	*Physics Seminars* Department of Physics, College of Arts and Sciences, American University of Sharjah, Sharjah, United Arab Emirates
Jun 23-27, 2025 ○	Contributed Talk	*European Astronomical Society Annual Meeting EAS2025* University College Cork, Cork, Ireland
Jun 09-13, 2025 ○	Contributed Talk	*IAU Symposium 396: Massive Galaxies Across the Universe* Complesso dei SS. Marcellino e Festo Largo San Marcellino, Naples, Italy
Jun 05, 2025 •	**Invited Seminar**	*Astro Seminars* INAF Osservatorio di Roma, Monte Porzio Catone, Rome, Italy
Dec 17, 2024 •	**Invited Talk**	*Galaxies/AGN Journal Club* Space Telescope Science Institute, Baltimore, Maryland, USA
Dec 09-13, 2024 ○	Contributed Talk	*Deciphering the Cosmic Code for Galaxy Formation* Hotel Cumbres Puerto Varas, Puerto Varas, Chile
Nov 27, 2024 •	**Invited Seminar**	*Astro Seminars* Department of Physics & Astronomy, University of Pennsylvania, Philadelphia, Pennsylvania, USA
Jul 29 - Aug 02, 2024 ○	Contributed Talk	*2024 Santa Cruz Galaxy Workshop* University of California Santa Cruz, Santa Cruz, California, USA

Oct 27, 2023	Contributed Mini-talk	*AstroJamboree 2023* Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
Sep 13, 2023	**Invited Seminar**	*Physics Seminar Series* Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates
Jul 20, 2023	**Invited Seminar**	*AstroBicocca seminar* Dipartimento di Fisica "Occhialini", Università degli Studi di Milano Bicocca, Milano, Italy
Jul 10–14, 2023	Contributed Talk	*European Astronomical Society Annual Meeting EAS2023* ICE Kraków Conference Centre, Kraków, Poland
Jul 10–14, 2023	Contributed ePoster	*European Astronomical Society Annual Meeting EAS2023* ICE Kraków Conference Centre, Kraków, Poland
May 08, 2023	**Invited Seminar**	*UCSC Zoom CGI (Cosmology/Galaxies/IGM) seminar* University of California Santa Cruz, Santa Cruz, California, USA
Mar 02, 2023	**Invited Seminar**	*IAC Talks 2023* Instituto de Astrofísica de Canarias (IAC), La Laguna, Tenerife, Spain
Feb 03, 2023	**Invited Seminar**	*Fall "Lunch Talk" series* Carnegie Observatories, Pasadena, California, USA
Jan 26, 2023	**Invited Talk**	*"Cake Talk" series* The Cosmic Dawn Center – DAWN, Copenhagen, Denmark, Europe
Dec 09, 2022	**Invited Seminar**	*UMD Cosmology Group* Department of Astronomy, University of Maryland, College Park, Maryland, USA
Dec 08, 2022	**Invited Talk**	*Science Hour* Space Telescope Science Institute, Baltimore, Maryland, USA
Oct 19, 2022	Contributed Mini-talk	*AstroJamboree 2022* Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
Jun 27 – Jul 01, 2022	Contributed Talk	*European Astronomical Society Annual Meeting EAS2022* Valencia Conference Centre, Valencia, Spain
Jun 16, 2022	**Invited Seminar**	*DAEC Talk* Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
May 30 – Jun 01, 2022	Contributed Mini-talk & ePoster	*International Conference on Machine Learning for Astrophysics – ML4Astro* Il Principe Hotel, Catania, Italy
Apr 21, 2022	**Invited Talk**	*Galaxies and AGN seminar and Journal Club* Space Telescope Science Institute, Baltimore, Maryland, USA
Jun 30, 2021	**Invited seminar**	*IA-UNAM Colloquium* Instituto de Astronomía, Universidad Nacional Autónoma de México, Mexico City, Mexico
Jun 28 – Jul 03, 2021	Contributed Mini-talk + ePoster	*European Astronomical Society Annual Meeting EAS2021* Leiden, The Netherlands (virtual meeting)
May 17–21, 2021	Contributed Talk	*Applications of Statistical Methods and Machine Learning in the Space Sciences* Space Science Institute, Boulder, Colorado (virtual meeting)
Sep 02, 2020	Contributed Talk	*Bologna Astrophysics Talk* Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA
Jun 29 – Jul 03, 2020	Contributed Talk	*European Astronomical Society Annual Meeting EAS2020* Leiden, The Netherlands (virtual meeting)
Jun 29 – Jul 03, 2020	Contributed Mini-talk + ePoster	*European Astronomical Society Annual Meeting EAS2020* Leiden, The Netherlands (virtual meeting)
Mar 02–06, 2020	Contributed Talk	*IAU Symposium 359: Galaxy Evolution and Feedback Across Different Environments* Bento Gonçalves, RS, Brazil (virtual meeting)

Jan 13, 2020 ○ Contributed Talk — *Bologna Astrophysics Talk*
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA

Nov 25, 2019 ● **Invited seminar** — *CosmoClub*
University of California Santa Cruz, Santa Cruz, California, USA

Aug 05-09, 2019 ○ Contributed Poster — *2019 Santa Cruz Galaxy Workshop*
University of California Santa Cruz, Santa Cruz, California, USA

Oct 16, 2018 ○ Contributed Talk — *Bologna Astrophysics Talk*
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA

Sep 03-07, 2018 ○ Contributed Poster — *Birth, life and fate of massive galaxies and their central beating heart*
Favignana Island, Sicily, Italy

Aug 06-10, 2018 ○ Contributed Talk — *2018 Santa Cruz Galaxy Workshop*
University of California Santa Cruz, Santa Cruz, California, USA

Workshops & schools

Nov 30 - Dec 02, 2020 ● **The Interstellar Medium**
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA (virtual Ph.D. school)

Sep 17-22, 2020 ● **Gaia: Great advances in Astrophysics**
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA (virtual Ph.D. school)

May 27 - Jul 22, 2020 ● **Neutrinos and Dark Matter in Astro- and Particle Physics**
SFB1258 Neutrinos and Dark Matter Munich (virtual Ph.D. school)

May 14-15, 2020 ● **Workshop on Perspectives and Applications of Deep Learning for Accelerated Scientific Discovery in Physics**
DARK Copenhagen (virtual workshop)

Nov 12-21, 2019 ● **Applied Artificial Intelligence Institute – Workshop fall 2019**
University of California Santa Cruz, Astronomy Department & Santa Cruz Institute for Particle Physics (SCIPP)

Jul 08 - Aug 16, 2019 ● **Kavli Summer Program in Astrophysics: Machine Learning in the Era of Large Astronomical Surveys**
University of California Santa Cruz, Astronomy Department & Santa Cruz Institute for Particle Physics (SCIPP)

Feb 25-27, 2019 ● **ALMA Science and Proposals Workshop**
Italian ALMA Regional Centre, INAF – Istituto di Radioastronomia Bologna

May 14-27, 2018 ● **27th Summer School on Parallel Computing CINECA – High Performance Computing program**
Casalecchio di Reno, Bologna, Italy

Nov 06-17, 2017 ● **Everything you always wanted to know about Python**
Alma Mater Studiorum University of Bologna – Department of Physics Astronomy DIFA (Ph.D. school)

OUTREACH & INTERVIEWS

Oct 30, 2025 ● ***"An(other) 'Interstellar' Evening"***
Film Screening, Arts Center, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Oct 09, 2025 ● ***"An 'Interstellar' Evening"***
Film Screening, Arts Center, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Sep 10, 2025 ● ***"Cosmic Recipes: Galaxies Deep-Fried in the Oil of the Big Bang"***
Physics & Drinks, STEAM Academy 2025 (Academy of Distinction link), Street Factory eCLettica, Caltanissetta, Italy

Mar 10, 2025 ● ***"Lunar Phases with Dr. Carlo Cannarozzo"***
NYUAD CASS TikTok channel (TikTok link), Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Mar 10, 2025 • ***"Lunar Fun Facts: Q&A with Dr. Carlo Cannarozzo"***
NYUAD CASS TikTok channel (TikTok link), Center for Astrophysics and Space Science, New York University Abu Dhabi, Abu Dhabi, United Arab Emirates

Mar 27, 2024 • ***"How to cook a galaxy in a kitchen called Universe"***
Astronomy on Tap Baltimore: Eclipses Glasses, Science Chances, and Galaxy Dances (AoT link), Guilford Hall Brewery, Baltimore, Maryland, USA

Dec 18, 2023 • ***"How to study the Universe with Carlo, an astrophysicist"***
Live interview "Space Valley Twitch" (YouTube link), Italy

Nov 18, 2022 • ***"How to become an astrophysicist?"***
Course in Physics at I.I.S.S. "S. Mottura", Caltanissetta, Italy

Feb 01, 2021 • ***Carlo: Do AIs Dream of Electric Galaxies?***
Podcast "Dottorato et al." – ADIBO (Spotify link), Italy

Sep 27, 2018 • ***Beyond the Darkness***
Liceo Scientifico "Alessandro Volta", Caltanissetta, Italy

Mar 27, 2018 • ***The Invisible Universe: from Black Holes to the Large Scale Structures***
8º Course in Astrophysics at I.I.S.S. "S. Mottura", Caltanissetta, Italy

Apr 17, 2015 • ***From Blackbody Radiation to the Hydrogen 21 cm Line***
7º Course in Astrophysics at I.I.S.S. "S. Mottura", Caltanissetta, Italy

CARLO'S THESES

Ph.D. Thesis

Title — *The merger-driven evolution of early-type galaxies and the connection with their dark matter halos* (link)

Advisor — Prof. Carlo Nipoti

Co-advisor — Prof. Alessandro Sonnenfeld

Description — My Ph.D. project concerns the merger-driven evolution of early-type galaxies, studying internal scaling relations, the role of in-situ and ex-situ star formation and the connection with dark matter halos.

Master's Thesis

Title — *A new void finder based on cosmic dynamics* (link)

Advisor — Prof. Lauro Moscardini

Co-advisor — Prof. Federico Marulli

Description — This thesis concerns the development of a new void finder based on a dynamical criterion and the application to dark matter halo samples.

Bachelor's Thesis

Title — *Emissione di Corpo Nero e applicazioni astrofisiche*

Advisor — Prof. Daniele Dallacasa

Description — This thesis concerns the theory of the Black Body emission and some astrophysical examples (e.g., stars, CMB).

LIST OF PUBLICATIONS

Main contribution papers

2026 · MNRAS · *submitted*
It is not the Fundamental Plane that bends: it is the direction from which it is viewed
Cannarozzo, Rodríguez-Puebla, Cano-Díaz, Ávila-Reese, Faber, Macciò, Bernardi, Nipoti, Sheth, Sonnenfeld
Paper I of a four-paper series on the scaling relations of early-type galaxies.

2026 · MNRAS
Feedback-driven interactions between dark and luminous matter to explain tight galaxy scaling relations
Alrawas, Macciò & **Cannarozzo** NASA ADS link

2026 · MNRAS · *submitted*
Empirical estimates of how massive galaxies can be in ΛCDM
Enríquez-Vargas, Rodríguez-Puebla, Manuwal, Yung, Ávila-Reese, **Cannarozzo** NASA ADS link

2025 · MNRAS
On matching galaxy number densities to reconstruct galaxy evolutionary tracks
Rodríguez-Puebla, Ávila-Reese, Primack, **Cannarozzo** NASA ADS link

2025 · MNRAS
Gas accretion at high redshift: Cold Flows all the way
Waterval, **Cannarozzo** & Macciò NASA ADS link

2024 · MNRAS
Non-Monotonic Relations of Galaxy Star Formation, Radius, and Structure at Fixed Stellar Mass
Stephenson, Rodríguez-Puebla, Faber, Primack, Ávila-Reese, Calette, **Cannarozzo**, Kakos, Cano-Díaz, Koo, Shankar, Morell NASA ADS link

2023 · MNRAS
The contribution of in-situ and ex-situ star formation in early-type galaxies: MaNGA versus IllustrisTNG
Cannarozzo, Leauthaud, Oyarzún, Nipoti, Diemer, Huang, Rodriguez-Gomez, Sonnenfeld, Bundy NASA ADS link

2020 · MNRAS
Stellar velocity dispersion and initial mass function gradients in dissipationless galaxy mergers
Nipoti, **Cannarozzo**, Sonnenfeld, Calura, Treu NASA ADS link

2020 · MNRAS
The cosmic evolution of the stellar mass–velocity dispersion relation of early-type galaxies
Cannarozzo, Sonnenfeld & Nipoti NASA ADS link

Other papers

2026 · ApJ · *submitted*
The Connection between Halo Assembly History and the Stellar Distribution I: The Central Stellar Mass–Richness Plane
Xu, Huang, Leauthaud, Diemer, Leidig, Zhou, **Cannarozzo** NASA ADS link

2025 · JCAP
Relationship between 2D and 3D Galaxy Stellar Mass and Correlations with Halo Mass
Zhou, Leauthaud, Xu, Diemer, Huang, Leidig, Jeltema, Gatti, Luo, **Cannarozzo**, Heydenreich NASA ADS link

2025 · ApJ
The Outskirt Stellar Mass of Low-Redshift Massive Galaxies is an Excellent Halo Mass Proxy in Illustris/IllustrisTNG Simulations
Xu, Huang, Leauthaud, Diemer, Leidig, **Cannarozzo**, Zhou NASA ADS link

2023 · MNRAS
The evolution of radial gradients of MaNGA quiescent elliptical galaxies: inside-out quenching or outer mass growth?
Ávila-Reese, Ibarra-Medel, Lacerna, Rodríguez-Puebla, Vázquez-Mata, Sánchez, Hernández-Toledo, **Cannarozzo** NASA ADS link

Conference proceedings

2020 · Proceedings of IAU Symposium 359 · *refereed*
The merger-driven evolution of massive early-type galaxies
Cannarozzo, Nipoti, Sonnenfeld, Leauthaud, Huang, Diemer, Oyarzún NASA ADS link