

PERSONAL INFORMATION

Adriano Fontana



 INAF Osservatorio Astronomico di Roma, Via di Frascati 33, 00078, Rome, Italy

 +39 06 942 864 56  +39 337 1090 857

 adriano.fontana@inaf.it

 <http://www.oa-roma.inaf.it/fontana>

 Skype: AdrianoFontana

ORCID: 0000-0003-3820-2823

Sex Male (he/him/his) | Date of birth 29/11/1962 | Nationality Italian

WORK EXPERIENCE

Active positions

Aug 1, 2016 - now

Oct , 2013 - now

“Dirigente di Ricerca” (Research Director) at INAF – Osservatorio di Roma
President of the LBT Corporation

WORK EXPERIENCE

PREVIOUS POSITIONS

Nov, 2010 – Nov 2019

Jan 2004 – Jul 2016

Apr 1998 – Jun 1998

Jun 1995- Jul 1995

Jan 1994 – Dec 2004

Nov 1993

Professor of “Astrofisica Extragalattica” at the Rome University La Sapienza
“Astronomo Associato” (Associate Astronomer) at INAF – Osservatorio di Roma
Visiting Astronomer at ESO- Garching
Unpaid associate at ESO - Garching
“Ricercatore Astronomo” (Researcher) at INAF – Osservatorio di Roma
Visiting Astronomer at ESO - Garching

EDUCATION AND TRAINING

2004

1994

1989

Training course on Project Management (Profingest, Bologna)
PhD in Physics and Astrophysics – University of Rome La Sapienza
Master Degree 110/110 *cum laude* in Physics – University of Rome La Sapienza

PERSONAL SKILLS

Mother tongue

Other language(s)

Italian

English (Excellent, both written and oral)

Digital competence

SELF-ASSESSMENT

Information processing	Communication	Content creation	Safety	Problem solving
Proficient	Independent	Independent	Basic	Independent

- Programming languages: Fortran, C, python
- Astronomical software: Midas, IRAF, SM

CURRENT MANAGEMENT RESPONSIBILITIES

Feb 2022 - now

Coordinator of the STILES funding programme

I have proposed and I am currently leading a **70M€** funding program dubbed STILES (“STrengthening the Italian Leadership in ELT and Ska”), which is an ambitious, comprehensive, and transformational program coordinated by INAF and participated by 7 collaborating Universities. STILES’ ultimate goal is establishing a firm Italian leadership in the technological developments and scientific exploitation of ELT, SKA - and of their precursors on the path. The program, that is scheduled to run until late 2025, will transform the capability of Italian laboratories, develop innovative instrumentation for ELT and SKA, and train a new generation of scientists and engineers.

June, 2016 - now

Head of the INAF Division for Optical-NIR astronomy

This INAF Division (established in 2016 under my direction) directly supervises and manages all the Italian participations to Optical-NIR astronomical projects from ground (mainly ESO, LBT and TNG) and space (GAIA, Euclid, CHEOPS, PLATO among the others). In this capacity, I oversee a) all the institutional relations with the relevant governing bodies, b) the development of instrumentation for all these facilities; c) The execution of major scientific projects with a leading Italian role. The overall budget of the Division (that does not include the ESO yearly contribution) is about **10M€/yr**.

Oct, 2013 - now

President of the LBT Corporation

The LBT Corp. is an independent legal entity, based in Tucson (AZ, USA) that manages all the activities related to the Large Binocular Telescope. In my capacity of President, I oversee the general management of the affairs of the Corporation, with the direct responsibility of signing all the financial transactions of the Corporation, and implement all the policies and directives of the Board, in particular overseeing the activity of the Telescope Director. The overall budget of the Corporation is about **13M\$/year**.

Oct, 2012 - now

Chair of LBT Board of Directors

As a Chair of the Board of Directors of the LBT Corporation, (that is different from the President) I preside at all meetings of the Board and I am responsible that all policies of the Board are carried out. My main role is here is acting as an interface with all the Board Directors and Institutional Members from MPGs, INAF and several US universities.

Membership of International Project/Institutional Boards

INAF delegate at ESO Council (2019-2022)

LSST Corporation Executive Board (2019-now)

WST Steering Committee (2022-now)

ANDES@ELT Steering Committee (2022-now)

MORFEO@ELT Steering Committee (2018-now)

WEAVE Project Board (2016-now)

ASDC Board (2009-2014)

ASTRONET Executive Board (2005-2007)

PREVIOUS MANAGEMENT RESPONSIBILITIES

2013 - 2016

European Coordinator of the FP7 European project ASTRODEEP

I led ASTRODEEP, a collaborative project among 4 institutes (INAF, CEA, UEdin, CDS) funded for a total of 2MEuro within the FP7-SPACE framework. It is a co-ordinated and comprehensive program of algorithm/software development and testing, data reduction/release, and scientific data validation/analysis aimed at making Europe the world leader in the exploitation of the deepest multi-frequency data from the major space and ground-based observatories.

2011 - 2017

Lead of the Organization Unit "MER" of the Euclid mission

The ESA mission Euclid is a major flagship of European astronomy. I have the responsibility of MER, a trans-national unit of the Ground Segment that is charged to design and develop the core of the data processing system, i.e. the part that collects data from Euclid and ground based surveys and prepares the final multiwavelength catalogue. The collaboration involves ~20 scientists and software engineers mainly from Italy, Germany and France.

2005-2007

President of the INAF Science Council

I have been President of the INAF Science Council, the first established soon after the constitution of INAF itself. I led the preparation of the first Long Term Plan of Italian Astronomy. This document presents a unified vision of the main topics in astronomy and astrophysics in the foreseeable future, and identifies the scientific and technological areas where INAF should focus its efforts during the next decade.

2005-2007

Coordinator of INAF activities in the ASI Space Data Centre

During the first period of the ASI-INAF agreement for the operations of ASDC I have acted as Coordinator of the INAF staff to perform scientific operations and to cooperate with INAF Institutes. I supervised the activities of INAF personnel, operating in support of space missions (mainly AGILE, GLAST, SWIFT, GAIA)

MANAGEMENT OF MAJOR SCIENTIFIC PROJECTS

2022-now

Co-I of the JWST GLASS ERS program – responsible for the analysis and release of the NIRCAM data.

2014-2017

Principal Investigator of the ESO-VLT KMOS Large Program, *"The formation and evolution of galaxies from cosmic dawn to high-noon under a magnifying GLASS"*

2014-2021

Executive Board of the ESO public survey VANDELS

2012-2017

European coordinator of the FP7-SPACE project ASTRODEEP

2010-now

Executive Board of the HST survey CANDELS

2010-2014

Principal Investigator of the HUGS survey, based on the ESO-VLT Large Program *"A complete view of the first 2 billion years of galaxy formation"*

2008-2010

Principal Investigator of the ESO-VLT Large Program ESO VLT, *"A deep infrared view of the early Universe: exploiting the unique capabilities of HAWK-I to explore the reionization epoch"*

2005-2008

Coordinator of the GOODS-MUSIC survey

2005-now

Coordinator of the research Group of Observational Cosmology and Galaxy Evolution at the INAF - Rome Observatory, which has several leading responsibilities in projects using ESO, LBT, ALMA HST, Spitzer and other world-class instrumentation.

SCIENTIFIC ACHIEVEMENTS

General description

My main research field is the study of Galaxies, AGNs, IGM and their co-evolution, primarily as obtained from deep imaging and multiwavelength surveys with ground based and space telescopes.

I have been Principal Investigator of 3 Large Programs with ESO VLT instrumentation.

I am PI of many accepted proposals at TNG, LBT, NTT, VLT, ALMA, HST.

I led the HUGS survey, executed with Hawk-I@VLT, delivering the deepest view on IR-selected galaxies ever obtained.

I am a main participant to several extragalactic surveys (K20, GOODS, CANDELS, VUDS VANDELS, Frontier Fields, CEERS, GLASS, GLASS-JWST, PRIMER) executed with VLT, HST, Spitzer, Webb and other world-class facility instruments.

I have been among the very first astronomers to use VLT, both as part of the Science Verification Team and as one of the very first observer of the normal programs.

- Publications**
- I am author of about 450 scientific publications (based on ADS).
 - A full list of refereed papers is available at:
<https://ui.adsabs.harvard.edu/user/libraries/8Svli4ZrS6uRMmDSlyzeTA>
 - Of these, about 330 are published in peer-reviewed journals (as of Feb 27, 2023), for a total of more than 27500 citations.
 - I am first author in 13 of them, and among the first three authors in 57 of them.
 - 65 papers of mine have more than 100 citations; I am among the three first authors in 17 of them.
 - I am author of 5 letters to Nature, 1 to Science, and 41 to ApJL.

- Impact factor**
- As of 26 March 19, my impact factor *h-index* is 86 (based on ADS, computed on refereed papers).
 - Based on a survey conducted in 2013, I am leading author in 2 of the 25 most important papers produced by VLT in its first 15 years (<http://sciencewatch.com/articles/very-large-telescope-first-fifteen-years-discovery>)

- Main Results**
- My research activity tries to address a simple yet difficult question: how galaxies formed and evolved, especially in the first Gyrs of the Universe's life. Answering this question implies working on a number of inter-connected aspects, like:
- High redshift galaxies, stellar mass assembly, luminosity and mass functions, galaxy morphological evolution, clustering and large scale structures, obscured AGNs and their feedback on galaxy evolution.
 - Spectral evolution of galaxies and link with stellar astrophysics.
 - Wide field imaging and spectroscopic surveys.
 - Development of theoretical models of galaxy formation and evolution.
 - Intergalactic medium at high redshift, ionization and metal content of Lyman α forest and metal systems, connection with high redshift galaxies.
 - Development of software for astronomical data processing, Data Grid.
 - Development of optical/IR instrumentation at large telescopes.

My main results have been obtained using wide extragalactic surveys with the most advanced instrumentation available: from ground-based instruments like VLT and space missions like HST, Spitzer and more recently JWSTR. The topics I have most contributed to are:

- **The assembly of massive galaxies at high redshift.** In a number of seminal and recent papers (e.g.. Fontana+2003, 04, 06, Santini 2009, 2012, Grazian+2015) I have depicted the evolution of massive galaxies at $z > 2$; I have shown that the growth of massive galaxies occurs at fast pace in the first 2-3 Gyrs of the Universe, such that about 50% of present-day mass of massive galaxies is already assembled at $z \sim 1.5$. In recent years, using first HST and recently JWST, I have characterized the growth of red, quiescent and massive galaxies and shown that they exist at all redshifts up to at least 4 (Grazian+07, Fontana+09, Grazian+15, Merlin+19, Santini+22).

- **The search for the highest redshift galaxies.** Thanks to a combination of deep imaging surveys and spectroscopic follow-up I have progressively identified galaxies at the greatest distances ever recorded (e.g. Fontana+95, Vanzella+11 Finkelstein+15) and studied the general properties of high- z galaxies in several aspects, including the comparison with theoretical models developed at the purpose (e.g. Fontana+1999, Grazian+2011). Recent results with JWST expanded this search to $z \sim 12$ and beyond (Castellano, Fontana+ 2022, 2023).

- **Tracing the reionization of the Universe.** Using extended spectroscopic programs that I led (based on VLT-FORS2 first and VLT-KMOS) I have for the first time shown direct evidence of an increasingly neutral Inter Galactic Medium at $z > 6.5$, as shown by the decrease in the density of Ly emitting galaxies at $z > 6.5$ (Fontana+10, Pentericci+11, 14, Mason+19). This sets a sharp constraint for the timing of reionization after the Dark Ages.

- **Advanced methods for data analysis.** During my whole career I have also developed and made public several new approaches to data analysis. Starting first with the spectroscopic FITLYMAN code originally installed in Midas (Fontana, Ballester 1995) I have developed methods for photometric redshifts since the early definition of the technique (Fontana+1998) and recently for de-blended photometry in deep extragalactic surveys (CONVPHOT, DeSantis+2007, T-PHOT and A-PHOT Merlin+2015-2018). Thanks to this experience I had been P.I of the FP7-SPACE project ASTRODEEP and of the Euclid Organizational Unit named MER, which is in charge of preparing the Euclid pipeline for the photometric measurements.

MAIN PARTICIPATIONS TO
SCIENTIFIC COMMITTEES
AND APPROVED INSTRUMENT
TEAM
2015

MOS@E-ELT

- 2012 Hubble Deep Fields Initiative 2012 Science Working Group (NASA/STScI)
- 2012 Project Scientist for the extragalactic case of MOONS (ESO)
- 2010 DIORAMAS@E-ELT
- 2008-2009 Member of the ESO OPC / Chair of Extragalactic panel
- 2008 Euclid
- 2006 DUNE
- 2004-2008 LBC Commissioning team
- 2005-2006 LBC Science Demonstration Time Committee (LBT)
- 2004-2007 Chairman of the Hawk-I Instrument Team (ESO)
- 2003 Italian Committee on Surveys
- 2002 Italian Committee on Databases in Astronomy
- 2001 LBC@LBT - Project Scientist of the Instrument SW
- 2001-2002 TAC for the Telescopio Nazionale Galileo
- 2000 UVES – SW development and characterization
- 1999 SUSI2@NTT - ESO. Responsible of science commissioning
- 1998 ESO VLT-UT1 Science Verification Team
- 2005-now Coordinator of the research Group of Observational Cosmology and Galaxy Evolution at the INAF - Rome Observatory, which has several leading responsibilities in projects using ESO, LBT, ALMA HST, Spitzer and other world-class instrumentation.

TEACHING

University/PhD Courses

- 2010-2019 Professor at Università La Sapienza di Roma, teaching “*Astrofisica Extragalattica*” (48hr course) for the Master Course on Astronomy and Astrophysics.
- 2006 Professor of *Database in astrophysics* for PhD students at l'Università di Tor Vergata - Roma ^[SEP]
- 2002 Professor of *Cosmic structures at high redshifts* for PhD students at l'Università di Tor Vergata -
- 2001 Professor of “*High redshift galaxies: theory and observations*” at the Università di Roma 3

Supervisor of master and PhD dissertation:

- 2023 PhD in Astronomy&Astrophysics– *Università Tor Vergata*– Lavanya Nemani
- 2022 PhD in Astronomy&Astrophysics – *Università La Sapienza* – Flaminia Fortuni
- 2021 PhD in Astronomy&Astrophysics – *Università La Sapienza* – Marianna Torelli
- 2018 Master degree in Astronomy&Astrophysics – *Università La Sapienza* – Flaminia Fortuni
- 2018 Master degree in Astronomy&Astrophysics – *Università La Sapienza* – Michael Romano
- 2015 Master degree in Astronomy&Astrophysics – *Università La Sapienza* – Antonello Calabro'
- 2015 Master degree in Astronomy&Astrophysics – *Università La Sapienza* – Graziano Ucci
- 2013 Master degree in Astronomy&Astrophysics – *Università La Sapienza* – Paola Di Mauro
- 2012 Master degree in Physics – *Università La Sapienza* - Stefano Pilo
- 2009 Master degree Magistrale in Astronomy&Astrophysics – *Università La Sapienza* – Tiziana Trombetti
- 2009 PhD in Astronomy&Astrophysics – *Università La Sapienza* – Paola Santini
- 2007 PhD in Astronomy&Astrophysics – *Università di Tor Vergata* – Immacolata Donnarumma
- 2004 Master degree in Physics – *Università La Sapienza* - Davide Ceccarelli

Member of PhD Thesis Commissions:

- 2019 University of Edinburgh – Tom Kemp
- 2018 Université de Paris 7 – Stefania Amodeo
- 2017 University of Edinburgh – Derek McLeod
- 2017 Université de Paris 7 – Gael Noirot
- 2016 Università di Trieste – Emanuele Pomante
- 2016 SISSA - Emanuele Sobacchi
- 2010 Strasbourg University – Audrey Galamez

2010 SISSA – Pratika Dayal

CONFERENCES

- 1998-2022 Invited speaker to many international conferences
- 1996-2019 Invited Seminars at International Institutes like ESO (Munich joint colloquim) Laboratoire d'Astrophysique de Marseille (LAM), Leiden Observatory, Heidelberg Steinwarte, Edinburgh Observatory, UCLA
- 2023 SOC of the International conference "STEM65"
- 2023 SOC of the International conference "The James Webb Space Telescope turns one: the birth and growth of galaxies"
- 2023 SOC Chair of the International conference "The early growth of galaxies VIII"
- 2022 SOC of the International conference "LSST@Europe 3"
- 2021 SOC Chair of the International conference "The early growth of galaxies VII"
- 2020 SOC Chair of the International conference "The early growth of galaxies VI"
- 2019 SOC Chair of the Conference "Euclid and Beyond: the many faces of modern cosmology"
- 2019 SOC member of the series of 3 International conferences "Extremely Big Eyes on the Early Universe", held in Los Angeles, Tokyo, Rome
- 2019 SOC Chair of the International conference "The early growth of galaxies V"
- 2018 SOC Member of the International conference "Birth, life and fate of massive galaxies and their central beating heart"
- 2018 SOC Chair of the International conference "The early growth of galaxies IV"
- 2017 SOC Chair of the International conference "The early growth of galaxies III"
- 2016 SOC Chair of the International conference "The HST, Spitzer and Herschel joint legacy"
- 2015 SOC Member of the international conference "Science with MOS: towards the E-ELT" – Cefalu'
- 2015 SOC Chair of the International conference "The Spectral Energy Distribution of high redshift galaxies: lessons learned and open questions" Sesto Val Pusteria
- 2014 Chair of Workshop Nazionale LBT - Padova
- 2013 SOC Member of the international conference "Star Formation Through Cosmic Time" Sexten
- 2012 Chair of Workshop Nazionale LBT - Padova
- 2011 SOC Member of the international conference "CANDELS in the high redshift Universe"
- 2008 SOC Member of the international conference "Probing Stellar Populations out to the Distant Universe"
- 2007 SOC Member of the international conference "Galaxy Growth in a Dark Universe", Heidelberg, lu

PRIZES

- 2006 Premio "Tartufari" dell'Accademia Nazionale dei Lincei
- 2001 Premio Ing. Franco Pietrandrea from Rotary Club Roma Castelli Romani: "Nascita ed evoluzione delle galassie: quale scenario?"

Research Funds

International projects

- 2013-2016 Coordinator of the FP7-SPACE "ASTRODEEP: unveiling the full power of deep extragalactic surveys" –**1,968,710€**
- 2011 Foreign Minister funds for LBT – ITA-USA collaboration. **30,000€**

Large scale Italian projects

- 2022-now P.I. of STILES ("STrengthening the Italian Leadership in Elt and Ska") – **69.999.999€**
- 2013-2018 National Coordinator of the ASI funds for Euclid OU-MER. **600,000 €**
- 2013 National Coordinator of the Project Premiale MIUR "Sensori Strategici per LBT: dal laser all'origine dell'Universo." **2,794,041.85€**
- 2012 National Coordinator of the Project Premiale MIUR "Sensori Strategici per LBT: dal laser all'origine dell'Universo." **2,490,000 €**
- 2007 WP Leader "Survey ed osservazioni multibanda:" of the contract ASI "Cosmologia e Fisica Fondamentale dallo Spazio" **800,000 €**

Small scale Italian projects (PRIN INAF e MIUR)

- 2012 National Coordinator of the PRIN INAF “A complete view of the first 2 billion years of galaxy formation” –**154,000€**
- 2010 National Coordinator of the project “CANDELS: Tracing the history of the Universe with the largest HST program” **86,000 €**
- 2008 Local Coordinator of the PRIN INAF “Feasibility and cost assessment of an extremely large Field of View spectrograph” (PI R. Ragazzoni). **82,000 €**
- 2008 Local Coordinator of the PRIN MIUR “ Survey infrarosse dell’Universo Primordiale: Galassie e AGN nel vicino IR. “ (PI A. Franceschini) –**48.131€**
- 2007 National Coordinator of the PRIN INAF “A deep VLT and LBT view of the early Universe: the physics of high redshift galaxies”. **160,000€**
- 2006 Local Coordinator of the PRIN MIUR “ Imaging Survey multicolore e ultraprofonde: galassie ed AGN fino all’epoca della reionizzazione “ (PI B. Marano) **62,000 €**
- 2003 Local Coordinator of the PRIN MIUR “Data Grid per la ricerca astrofisica in Italia: Strumenti per Analisi Dati LBC” – (PI F. Pasian) **55.200 €**

OUTREACH

I have a very active outreach activity. I perform public lectures (also in English), publish educational articles on magazine and I often get interviewed on national TV to comment astronomical discoveries. and other outreach activities, both at the Observatory and in other Institutes – also abroad, in English. with 3 TV interviews and several lectures at the most important scientific events. I have also organized an ESA event for the presentation of the very first Webb data on July 14, 2022. Since July 2022 I write a monthly article on “Focus”, one of the most important scientific magazines, to describe the wonderful discoveries made by JWST

International Press Releases

- 2022 NASA: “NASA’s Webb Draws Back Curtain on Universe’s Early Galaxies”, <https://webbtelescope.org/contents/news-releases/2022/news-2022-044>
- 2015 ESO: “ALMA Witnesses Assembly of Galaxies in the Early Universe for the First Time” , <http://www.eso.org/public/news/eso1530/>
- 2015 HST: “Hubble Sees Supernova Split into Four Images by Cosmic Lens”, <http://hubblesite.org/newscenter/archive/releases/2015/08/image/a/>
- 2013 HST: “Galaxy Found in Hubble Survey Has Farthest Confirmed Distance.”, <http://hubblesite.org/newscenter/archive/releases/2013/39/>
- 2011 ESO: “Distant Galaxies Reveal The Clearing of the Cosmic Fog”, <http://www.eso.org/public/news/eso1138/>
- 2004 ESO: “Old Galaxies in the Young Universe”, <http://www.eso.org/public/news/eso0422/>
- 2000 ESO: “Into the Epoch of Galaxy Formation”: <http://www.eso.org/public/news/eso0006/>
- 1998 ESO: “First Results from the UT1 Science Verification Programme”, <http://www.eso.org/public/news/eso9858/>
- 1998 ESO: “DEEP SKY DIVING WITH THE ESO NEW TECHNOLOGY TELESCOPE”, <http://www.eso.org/public/news/eso9801/>
- 1995 ESO: “ESO Astronomers Detect a Galaxy at the Edge of the Universe”, <http://www.eso.org/public/news/eso9526/>
- INAF I have appeared in many (28 at the moment) Press Releases in Italian media – full list available at <https://www.oa-roma.inaf.it/fontana/press-releases>

Public lectures

- 2023 Live Interview at “*PHOTOANSA 2022: Le immagini e I protagonisti dell’anno trascorso*”, Torino
- 2022 Public Lecture at “Giornata Nazionale della Spazio”, organized by Italian Embassy in Berlin, “*Universo primordiale, stelle in formazione e buchi neri: nuovi risultati da nuovi telescopi*”
- 2022 Public Lecture at Focus Event Live 2022: “*Le meraviglie del James Webb Space Telescope*”
- 2022 Public Lecture at Rome Science Festival: “*Le meraviglie del James Webb Space Telescope*”
- 2022 Public Lecture at Genova Science Festival: “*Le meraviglie del James Webb Space Telescope*”
- 2022 Public Lecture at CERN (CH): “*Webb, the most advanced space telescope*”
- 2022 Public Lecture at Catania Science Festival: “*Cosa e’ il James Webb Space Telescope*”
- 2022 Public Lecture at Rome University La Sapienza, organized by ESA, “*Webb first data*”
- 2022 Public Lecture at AESA Torino, Politecnico di Torino, “*Il Cielo Sostenibile*”
- 2021 Public Lecture at Focus Event Live 2021: “*Webb: il piu’ grande telescopio spaziale mai costruito*”
- 2021 Public Lecture at the Festival “ProMemoria”, Mirandola, Bo., entitled “*Memoria del Cosmo e Nascita*”

- dell'Universo*"
- 2021 Public conference "Studiare il cielo...con i piedi per terra", Rome IX municipio
 - 2017 Public Lecture in Brugherio (Mi), entitled :"*Sistemi ordination e sistemi caotici nell'Universo di ieri e di oggi*"
 - 2017 Public Lecture at the Festival "ProMemoria", Mirandola, Bo., entitled "*Memoria del Cosmo e Nascita dell'Universo*"
 - 2016 Public Lecture at the Aerospace Faculty of the Rome University La Sapienza, entitled "*Astronomy toward 2020*"
 - 2015 Public Lecture at the "SpaceUp!" workshop – Rome
 - 2014 Public Lecture at the Italian Embassy in Washington (USA), entitled "*From Galileo to giant telescopes: a journey through space and time*", to celebrate the 450 from Galileo's birth.
 - 2014 Public Lecture at Scuola Normale di Pisa: "*La galassia più distante mai osservata (the farthest galaxy ever observed)*"

Papers on popular science

magazines

- 2023 Apr. Focus, "Il mare in cui nuotano le galassie"
- 2023 Feb. Focus, "Gli asili nido delle stelle"
- 2023 Jan. Focus, "Vista sul passato piu' remoto"
- 2022, Dec Focus, "Il mistero nel cuore delle galassie"
- 2022, Oct Focus, "La prima vera sorpresa del Webb"
- 2022, Sep. Focus, "Ai confini dell'Universo"
- 2022, Jul Focus, "Tutti pronti per le prime foto del telescopio spaziale Webb"
- 2011, Sep Scientific American (Italian version)"Le prime sorgenti dell'Universo"