

PERSONAL INFORMATION

Francesca Panessa

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Sex Female | Date of birth 18/10/1976 | Nationality Italian

WORK EXPERIENCE

From December 2008

Astrophysics Researcher (permanent staff)

IAPS-INAF, Rome

▪ **TOPICS:** Extra-galactic sources investigated via multi-frequency observations. Accretion and ejection physics, in particular in jetted and non-jetted Active Galactic Nuclei (AGN). Unification Models for AGN. Synergies between future facilities (SKA, Athena, LSST, LISA, ESO, etc.). Water maser emission in AGN. Duty cycle and restarting activity in radio galaxies. Multi-messenger astrophysics. Search for high-energy emission counterpart from TDE, FRB, HE Neutrinos and GWs, and their multi-frequency follow-up.

November 2013 – April 2014

Maternity Leave

December 2007 – December 2008

Post-doctoral Researcher

IAPS-INAF, Rome, Italy

▪ **TOPICS:** AGN investigation at multi-frequency, X-ray and soft gamma ray data reduction and analysis.

December 2004 – December 2007

Post-doctoral Researcher “Juan de la Cierva”

IFCA, Santander, Spain

▪ **TOPICS:** AGN investigation at multi-frequency, X-ray data reduction and analysis, optical follow-up of AGN, supervision of a PhD student

May 2004 – December 2004

Post-doctoral Researcher

Center for Astrophysics, Cambridge, USA

▪ **TOPICS:** AGN multi-frequency analysis, Chandra data analysis on Composite SB/AGN galaxies

October 2002– October 2003

EARA Marie Curie Training Site fellowship

Institute of Astronomy, Cambridge, UK

EDUCATION AND TRAINING

January 2001 – January 2004

Philosophiae Doctor in Physics

University of Bologna, Italy

- Thesis Title: Multi-wavelength study of a sample of Seyfert galaxies
- Supervisors: Prof. R. Fanti (University of Bologna), Dr. L. Bassani & Dr. M. Cappi (INAF, OAS-Bologna)

October 1995 – December 2000

University Degree in Astronomy

University of Bologna, Italy

- Thesis Title: Unabsorbed type 2 Seyferts
- Supervisors: Prof. R. Fanti (University of Bologna), Dr. L. Bassani (INAF, OAS-Bologna)
- Score: 110/110 cum Laude

October 1990 – June 1995

Scientific High School Diploma

Liceo Scientifico Statale "T. Monticelli", Brindisi, Italy

PERSONAL SKILLS

Mother tongue(s) Italian

Other language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C2	C2	C2	C2	C2
Spanish	C2	C2	C2	C2	C1
French	B2	B2	B1	B1	A2

Levels: A1/A2: Basic user - B1/B2: Independent user - C1/C2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- Excellent communication skills acquired through my experience as scientific researcher at several research institutions in Italy and abroad, thanks to the participation at international meetings as conference speaker, and through teaching and tutoring activity carried out at Italian or international institutes and Universities. Acquired team spirit by collaborating with several Italian and international colleagues on different scientific topics and by managing and coordinating international teams. The organization of international conferences and meeting has also led to improve significantly communication skills.

Job-related skills

- experience in the management of projects and/or groups
- ability to organize personal work and collective work (coordinator of a small science group at IAPS)
- interaction skills in group work
- synthesis and exposure skills in written documents (e.g. referred journal papers) of personal work, collecting contributions of other team members, acquired in the training/work/association field)

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem solving
Proficient user	Proficient user	Independent user	Independent user	Independent user

Levels: Basic user - Independent user - Proficient user

Digital competences - Self-assessment grid

Other Computer skills:

- Operating systems: Linux, UNIX, MAC OS, Windows, VAX/VMS
- Command languages: Fortran, SMONGO, IDL, basic Pascal
- Graphical editors: OpenOffice, PowerPoint, Adobe Photoshop, Gimp, Keynote
- Word processor: Latex, TeXShop, Overleaf, Word
- Data analysis software: Excel, FTOOLS, SAOimage, DS9, Ciao, SAS, Xselect, Xspec, Ximage
- Astronomical archive: NED, HEASARC, SIMBAD, NRAO archive, arxiv

ADDITIONAL INFORMATION

Publications

- 84 papers on peer-reviewed journals (15 as first author)
- 118 papers on non-reviewed journals
- One Nature Astronomy Review paper in 2019 (first author)
- Total number citations: 3416
- H-index: 31
- Link to ADS: https://ui.adsabs.harvard.edu/search/q=%20author%3A%22panessa%2C%20francesca%22&sort=date%20desc%2C%20bibcode%20desc&p_0

Presentations

- Invited/Review talk at international workshops and conferences:
 - X-IFU Consortium Meeting #14, December 2021
 - 43rd COSPAR conference in August 2020, E1.4
 - SKA General Science Meeting and Key Science Workshop, Cheshire, 8-12 April 2019
 - AGN Spectral States Meeting in Prague, November 2019
 - The radio and X-ray connection in accreting objects, May 2018, Monopoli
 - The Second National Workshop of SKA Science and Technology 2018, Bologna
 - EWASS 2017, Symposium 4: Astrophysical jets and outflows
 - SKA-Athena synergy workshop, ESO, 2017
 - Lorentz Center Workshop "Observations and Theory of Quasar Outflow", March 2017
 - Spectral/timing properties of accreting objects: from X-ray binaries to AGN" ESAC, Madrid, April 3-5 2013
- Over 50 oral contributions to national and international workshops and conferences
- Over 30 seminars at national and international research institutes and universities

Observational experience

- Principal Investigator (PI) of more than 30 observing proposals at radio, IR, optical and X-ray telescopes (BeppoSAX, Suzaku, Chandra, XMM-Newton, INTEGRAL, Swift, ESO VLT/EMMI, ESO VLT/ISAAC, TNG, VLBA, VLA, EVN, AMI)
- Co-Investigator (co-I) of more than 60 observing proposals at radio, mm, IR, optical, UV and X-ray telescopes (BeppoSAX, Suzaku, Chandra, XMM-Newton, INTEGRAL, Swift, NuSTAR, Isaac Newton Group of Telescopes, ESO VLT/EMMI, ESO VLT/FORS2, SMARTS, TNG, HST, JVL, Effelsberg, e-MERLIN, Tidbinbilla, Geen Bank Telescope, IRAM-Noema, LMT, VLBA, EVN, AMI)

Grants

- National PI of the NuSTAR/NARO 2018 research fundings
- PI of the IAPS research unit for the Italian PRIN SKA/CTA, BANDO/ASI 2017 and NuSTAR/NARO 2015 research fundings
- PI of several AHEAD and COST Action funded projects for visiting periods at international universities and institutes
- PI of ESAC Faculty Council fundings for visiting scientists

Peer Review – Committee

- Reviewer for the NASA Hubble Fellowship programme
- Member of the European Science Foundation Pool of Reviewers
- Reviewer for the State Education Development Agency (SEDA) of the Republic of Latvia Post-Doctoral Research programme
- Reviewer for the **National Research, Development and Innovation Office**, Hungary
- External Reviewer of a Ph.D thesis at Universidad de Granada, Spain
- Reviewer for the PISCOPIA Fellowship Programme co-funded by Marie Curie Actions at the University of Padova (Italy)
- Reviewer for the Leading Fellows Postdoc Programme (The Netherlands)
- Reviewer for Nature Astronomy, ApJ, MNRAS, A&A, PoSS
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- Reviewer for the following observing facilities:
 - ✓ Italian LOFAR Peer Review committee (2020)
 - ✓ European VLBI Network Programme Committee (2017-2020)
 - ✓ Antenne Italiane (2018-2021)
 - ✓ ESO Panel (OPC101, OPC2103)
 - ✓ INTEGRAL TAC AO14
 - ✓ Chandra Peer Review committee (Cycle 13 & 20)
 - ✓ Gran Telescopio de Canarias peer review
 - ✓ XMM-Newton TAC AO9
 - ✓ e-MERLIN reviewer
 - ✓ GMRT Indian radio telescope

Honours and awards

- Winner of a Post-doc fellowship “Marie Curie FP6” at the Institute of Astronomy, Cambridge (UK) (not undertaken)
- First author of a Nature Astronomy Review titled “The Origin of radio emission in Radio-Quiet AGN”

Memberships

- Member of the Athena X-IFU Science Advisory Team
- Core member of the VLBI SKA Focus group
- Member of the “X-ray interferometer” project (<https://arxiv.org/abs/1908.03144>)
- IAPS-INAF Representative within the “Raggruppamento Scientifico di Raggruppamento Scientifico Nazionale - Astrofisica relativistica e particelle”
- Member of the IAPS-INAF “Consiglio di Struttura”
- LOFAR full member
- LISA Consortium full-member
- Athena working groups
- SKA working groups member
- LSST Italian collaboration member
- International Astronomical Union (IAU) member

Supervision and teaching

- Teacher at PhD program in Astronomy, Astrophysics and Space Science (Rome) 2021/22. Title of the class: The Sardinia Radio Telescope and the Square Kilometer Array.
- Teacher at the University of “La Sapienza” (2021). Title of the class: Laboratory of Radioastronomy
- Teacher at the “Master in Scienza e Tecnologia Spaziale” University of Tor Vergata (Rome) in 2012. Title of the class: Space Exploration
- Scientific supervisor of post-doctoral fellow at IAPS (INAF) Dr. Gabriele Bruni (2017-present)
- Scientific supervisor of post-doctoral fellow at Università di Torino Dr. Ranieri Baldi (2019-2020)
- Scientific supervisor of post-doctoral fellow at IAPS (INAF) Dr. Lorena Hernandez-Garcia (2016-2017)
- Scientific supervisor of the Ph.D. thesis of E. Chiaraluce at IAPS (2017-2021)
- Scientific supervisor of post-doc visiting scientist Erlin Qiao from Chinese Academy of Sciences
- Scientific tutor of the research stage of Samuele Ronchini - University of Tor Vergata (Rome) - 2018
- Scientific tutor of the research stage of Riccardo Gatani from University of La Sapienza (Rome)
- Co-supervisor of the Ph.D. thesis of A. Ruiz, “A multi-wavelength study of Hyper-Luminous Infrared Galaxies”, at Instituto de Fisica de Cantabria (CSIC-UC, Spain)

Events organization

- Main organizer of the COSPAR 2020 event "The space view of Radio Galaxies"
- Chair of the Scientific Organization Committee of the workshop "The radio and X-ray connection in accreting objects", 21-25 May, 2018, Monopoli (Italy)
- Deputy organizer of the COSPAR 2018 event "X- and Gamma-ray counterparts of the new transients in the multi-messenger exploration"
- co-Chair of the Scientific Organization Committee of the Lorentz Center Workshop "Observations and Theory of Quasar Outflows" 2017, Leiden, The Netherlands
- Main organizer of the COSPAR 2014 event "Challenges in the Unified Model of AGN"
- Chair of the Scientific Organization Committee of the conference "Black hole (g)Astronomy - Exploring the different flavours of accretion", 2-6 September 2013, Brindisi (Italy)
- Chair of the Scientific Organization Committee of the Exploratory Workshop "Cosmogony of AGN: unifying approaches for the next decade", funded by the European Science Foundation, September 2010, Brindisi (Italy)

Scientific Outreach

- Outreach conferences and activities at schools, cultural associations, public events
- Astronomical guide to the workshop Astrolab at the Osservatorio Astronomico di Monte Porzio (Rome)

Rome, December 2021

Signature

