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PERSONAL INFORMATION

Dr. Sergio Campana

ORCID: 0000-0001-6278-1576 Date of birth: 11 November 1965 Nationality: Italian and German

Married, three children

URL for web site: http://www.brera.inaf.it/~campana/webpage/sergio/Welcome.html

EDUCATION

1993 PhD in Astronomy – University of Milano, Department of Physics, Italy,

Advisors: Prof. L. Stella & Prof. G. Chincarini Problems on accretion onto compact objects

Master in Physics (summa cum laude)

University of Pavia, Department of Physics, Italy, (Ghislieri college alumnus),

Advisor: Prof. M. Carfora Topological fluctuations in quantum gravity

• CURRENT POSITION(S)

2016 – ... Dirigente di Ricerca (Full professor) Osservatorio astronomico di Brera (OAB) – INAF, Italy

PREVIOUS POSITIONS

2003 – 2016 Associate Astronomer at OAB – INAF, Italy

2000 – 2003 Staff Astronomer at OAB – INAF, Italy

1998 – 2000 Technical staff position on X-ray satellites at OAB – INAF, Italy

After my PhD, there was already a well-defined path for a fixed position working on the Joint European Telescope in X-rays (JET-X), then giving rise to the *Swift* X-ray Telescope. I spent a lot of time mainly between the Panter calibration facility (MPE, Germany), the University of Leicester, and the Penn State University, following the *Swift* XRT from the single mirrors to leading the in-flight calibration effort.

• FELLOWSHIPS AND AWARDS

 $2018-2022\ Ministero\ degli\ affari\ Esteri\ followship\ for\ the\ US-Italian\ cooperation\ on\ GW\ sources$

2009 Maria & Eric Muhlmann Award, Astronomical Society of the Pacific, Swift Team

2007 Bruno Rossi Prize (N. Gehrels & the Swift team)

2005 NASA Exceptional Scientific Achievement to the Swift Science team

1996 – 1998 Post-doc fellowship on the calibration and ground segment of the JET-X instrument at OAB – INAF, Italy

1994 – 1996 High Energy Astrophysics fellowship (Agenzia Spaziale Italiana) at OAB – INAF, Italy

1993 – 1994 Short visits: ICRA (1month, Roma, Italy), SISSA (3months, Trieste, Italy), Princeton University (1month, Princeton, USA)

• SUPERVISION OF GRADUATE STUDENTS AND POSTDOCTORAL FELLOWS

13 master thesis, 16 laurea thesis, 8 PhD thesis. More than 60% of my PhD students continued their research career in astrophysics.

During the Swift lifetime, I trained a number (>15) of post-docs, some paid on my own funds.

• TEACHING ACTIVITIES (last 5 years)

I usually teach data analysis to all my students (thesis and PhD), as well as the science topics related to their theses. Note that INAF is a research institute and I do not have formal teaching duties.

2014 – 2017 Ph.D. Physics and Astrophysics of University of Milano-Bicocca – Board member

• ORGANISATION OF SCIENTIFIC MEETINGS (last 5 years)

2024 Feb. Chair of the Fast Extragalactic Thinkshop (Bormio, Italy)

2023 June SOC Member of the Vasto accretion meeting (Vasto, Italy)

2023 Feb. Chair of the L* meeting in honour of Luigi Stella's retirement (Bormio, Italy)

2021 Apr. SOC Member of the Athena-Rubin synergy conference (online)

2020 Nov. Chair of the first SOXS Consortium meeting (online)

2018 Dec. Chair of the first Italian SOXS meeting (Pavia, Italy)

2016 Nov. SOC member of the IV Congresso Nazionale GRB (Bergamo, Italy)

2016 Jan. Chair of the international conference "Transients Thinkshop" (Bormio, Italy)

2017-19-22 SOC member/Chair of the National congress on compact objects (CNOC, creator in 1999, 2yr cadence)

• INSTITUTIONAL RESPONSIBILITIES (last 5 years)

2022 Member of a PhD Defence Committee in Astrophysics - Universities of Durham

2022 Member of a PhD Defence Committee in Astrophysics - Universities of Milano-Bicocca

2021Member of a PhD Defence Committee in Astrophysics - Universities of Palermo & Toulouse

2019 Member of a PhD Defence Committee in Astrophysics - University of Amsterdam

2018 President of the hiring Committee for one permanent position in Astrophysics at the IUSS-Pavia

2017 Member of the Ph.D. in Physics Selection Committee; University of Insubria

2016 President of the National hiring Committee for 3 permanent positions in high-energy astrophysics at INAF

2018 – 2023 President of (>10) hiring Committees for temporary post-doc positions at OAB

• REVIEWING ACTIVITIES (last 5 years)

2015 – ... Associate Editor for Astronomy & Astrophysics

2019-20-21 Panel member of China TAP program

2019–2021 Panel member of the Athena-LSST synergy group

2017-19-20 Evaluator for ERC Starting Grant applications

2017 & 2019 Evaluator for the Poland National Science Centre

2016 Evaluator for the Italian National Research Quality Evaluation ANVUR/VOR

I act as a scientific editor for Astronomy & Astrophysics, managing 200-250 A&A main journal papers and letters per year.

Referee for Nature, Science, The Astrophysical Journal, The Astrophysical Journal Letters, Astronomy & Astrophysics, Astronomy & Astrophysics Letters, Monthly Notices of the Royal Astronomical Society, Monthly Notices of the Royal Astronomical Society Letters, Optical Engineering, X-ray Optics and Instrumentations, Advances in Space Research, Nuovo Cimento, Journal of High-Energy Astrophysics.

• MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2017 - 2018 Member of the ePESSTO Science Board

2015 – ... IAU Member (Division D)

2002 - ... Swift associated scientist

 $\label{lem:member of several collaborations: GRAWITA (GW-Italy), ENGRAVE (GW-Europe), CIBO (GRB-Italy), Stargate (GRB-Europe); ePESSTO+ (Transients, Europe), Rubin/LSST (TVS).}$

• INSTRUMENTAL COLLABORATIONS

2022 PI of the High-redshift Universe GRB Observatory (HUGO) presented in response of the HORI-ZON-INFRA-2022-DEV-01 call

2014 - PI of the Son Of X-Shooter (SOXS) spectrograph presented in response to the ESO call for ideas

- at NTT. I am leading the Italian team made of >20 astronomers and coordinating the international team made of >40 astronomers
- 2004 Responsible for the calibration of the *Swift* X-ray Telescope. At the beginning of the mission, the calibration team I coordinated was made by >15 scientists, now it is reduced to a few
- 2013 PI of the Joint UV Survey Telescope (JUST) presented in response to the ESA Small Mission
- 2013 2014 PI of the mirror module of the XIAO telescope onboard ECLAIR
- Participation as co-I to several high-energy mission proposals: JET-X, Panoram-X, EXTRA, HEXIT, Simbol-X, Duet, ESTREMO, EDGE, Origin, Xenia, WFXT, EXIST, NHXM, Athena, Blackcat, Janus, MIRAX, LOFT, Theseus, XTiDE, XIPE, eXTP.

• OBSERVING EXPERIENCE (PI approved proposals)

- X-ray: ROSAT, BeppoSAX, ASCA, Chandra, XMM-Newton, RossiXTE, INTEGRAL, Swift, NuSTAR, NICER
- Optical/nIR: ESO-NTT/3.6, ESO-VLT, TNG, REM, HST
- Radio: Arecibo, VLA
- TeV: MAGIC

BOOKS

- 2019 Book Chapter Accreting pulsars: mixing-up accretion phases in transitional systems, S. Campana & T. Di Salvo, in *The physics and astrophysics of neutron stars*, eds. L. Rezzolla, et al., Springer.
- 2012 Editor of proceedings (and Chair of) of the international congress *GRBs as probes: from the progenitor's environment to the high redshift Universe*, eds. S. Campana, P. D'Avanzo, MemSAIt Suppl. Vol. 21.

BIBLIOMETRICS

- Referred papers (according to ADS): 439, citations: 32402, h-index: 80; first author papers: 66.
- All publications (including GCN and ATEL, according to ADS): 1353, citations: 35285, h-index: 82.
- 18 papers on Nature (2 first author), 1 N&V on Nature, 4 Nature Astronomy (1 first author), 5 on Science.
- I worked out a dedicated site for bibliometric studies: Astrometrics.

• INVITED TALKS ANS SEMINARS (last 5 yr)

- "HUGO: the high-redshift Universe GRB observatory" in Giornate INAF 2023 (Napoli, May 2023)
- "Propeller: from V0332 to IGR" in L* meeting (Bormio, February 2023)
- "Son Of X-Shooter: the transient hunter" in *HACK100* (Trieste, June 2022)
- "SOXS on the ESO-NTT 2023-2028" in ATLAS Science meeting (online, June 2022)
- "SOXS for the NTT" in SVOM workshop at OHP (online, November 2022)
- "The future or rapid spectroscopy, from GW sources and GRBs to X-ray binaries" in *ULTRASAT science workshop* (online, October 2021)
- "SOXS update" in *IV ePESSTO meeting* (online, September 2020)
- "FAST monitoring of the optical sky" in VST and beyond (online, June 2020)
- "Next-generation optical facilities in the multi-messenger era" in *The era of collaborative multi-wavelength and multi-messenger astronomy: science and technology* (Firenze, October 2019)
- "SOXS and the future landscape of instrumentation at ESO for transients" in *The extragalactic explosive* Universe: the new era of transient surveys and data-driven discovery (Garching, September 2019)
- "Observations of propeller accretion" in From winds to jets (Amsterdam, July 2019)
- "The Son of X-shooter" in III ePESSTO meeting (Roma, July 2018)
- "Magnetic propeller at different scales" in *The challenge of transitional millisecond pulsars* (Roma, Mar. 2018)
- "X-ray absorption towards distant sources: the metal fog," Invited Seminar at Turku University (April 2019)
- "The SOXS spectrograph and the transient sky", Invited Seminar at IASF Milano (January 2019)

• INTERNATIONAL PRESS RELEASES (direct involvement only)

NASA press release "NASA Missions Study What May Be a 1-In-10,000-Year GRB" (March 2023)

<u>HEAD 20 press conference</u> (Livestream-video, March 2023)

PSU press release "Brightest GRB ever recorded may be 1-in-10,000-year event" (March 2023)

ESO announcement "ESO's LSO to gain cutting-edge SOXS instrument" (Oct. 10, 2018)

ESA press release "Cosmic blast wave takes rest at last" (May 31, 2018)

NASA press release "Astronomers Uncover a Transformer Pulsar" (Sep. 25, 2013)

PSU press release "Transformer Star Discovered with X-rays and radio waves" (Sep. 25, 2013)

Scientific American "The strange case of the Christmas burst" (Dec. 24, 2011)

<u>France Soir</u> "Duex thèses pour expliquer le sursaut gamma de Noël" (Dec. 3, 2011)

El Mundo "Un raro estallido celeste admite dos explicaciones distintas subre su origen" (Dec. 1, 2011)

ScienceNews "Christmas gamma-ray burst still puzzles" (Nov. 30, 2011)

Space.com "Competing explanations proposed for strange Christmas space explosion" (Nov. 30, 2011)

CNN "Christmas gamma-ray burst debated" (Nov. 30, 2011)

<u>PSU press release</u> "Peculiar cosmic explosion on Christmas 2010 continues to intrigue astronomers" (Nov. 30, 2011)

NASA press release "NASA's Swift finds a gamma-ray burst with a dual personality" (Nov. 30, 2011)

<u>PSU press release</u> "Asteroid video captured by Nasa's Swift satellite" (Nov. 11, 2011)

NASA press release "NASA's Swift observatory catches asteroid flyby" (Nov. 10, 2011)

Image on the first page of the Corriere delle Sera (Aug. 31, 2006)

Science, "Flashing out a Star's Demise" (Aug. 30, 2006)

ESO press release "Witnessing the flash from a black hole's cannibal act" (Dec. 14, 2005)