

Curriculum Vitae

[ORCiD](#) | [Google Scholar](#) | [ADS/NASA](#) | [✉ jonathan.quirolavasquez@ru.nl](mailto:jonathan.quirolavasquez@ru.nl) |

CONTACT INFORMATION

Name: Jonathan Alexander Quirola Vásquez

Civil status: Married

Birth date and place: 26 November 1990, Quito, Ecuador (de Quitof)

Address: Dorpsstraat 132, Renkum, The Netherlands/Av 12 de Octubre and Colón, Quito, Ecuador.

EDUCATION

2018 - 2023 Ph.D. in Astrophysics, *Summa cum laude*, Pontificia Universidad Católica de Chile

2016 - 2018 MSc. in Astrophysics, *Summa cum laude*, Pontificia Universidad Católica de Chile

2009 - 2015 BSc. in Physics, *Cum laude*, Escuela Politécnica Nacional, Ecuador

CURRENT POSITION

2024 - present Postdoc position, Radboud University, The Netherlands, Advisor: Prof. P. Jonker

PROFESSIONAL HISTORY

2022 - 2024 Researcher, Astronomical Observatory of Quito-Escuela Politécnica Nacional, Ecuador

2023 - 2024 Postdoc, Pontificia Universidad Católica de Chile. Advisor: Prof. F. Bauer

2018 - 2023 Graduate research Assistant, Pontificia Universidad Católica de Chile. Advisor: Prof. F. Bauer

2016 - 2018 Graduate research Assistant, Pontificia Universidad Católica de Chile. Advisor: Prof. F. Bauer

2014 - 2016. Research Assistant, Escuela Politécnica Nacional, Ecuador. Advisor: Prof. N. Vásquez

TEACHING EXPERIENCE

2023 Aug. - 2023 Dec. Lecturer, *Physics for Life Science*, Universidad San Francisco de Quito, Ecuador

2023 Mar. - 2023 Jul. Lecturer, *Newtonian Physics*, Universidad de las Américas, Ecuador

2022 May. - 2022 Jul. Lecturer, *Electromagnetism*, Universidad San Francisco de Quito, Ecuador

2021 Aug. - 2021 Dec. Teaching assistant, *Frontiers in Astrophysics*, Pontificia Universidad Católica de Chile

2019 Aug. - 2019 Dec. Teaching assistant, *Astronomy*, Pontificia Universidad Católica de Chile

2019 Mar. - 2019 Jun. Teaching assistant, *Astronomy*, Pontificia Universidad Católica de Chile

2017 Aug. - 2017 Dec. Teaching assistant, *General Relativity and Gravitation*, Pontificia Universidad Católica de Chile

2017 Aug. - 2017 Dec. Teaching assistant, *Physical Processes in Astrophysics*, Pontificia Universidad Católica de Chile

2015 Sep. - 2016 Feb. Lecturer, *Mathematics IV*, School of Engineering, Universidad Internacional del Ecuador

2015 Sep. - 2016 Feb. Teaching assistant, *Optics (laboratory)*, Physics Department, Escuela Politécnica Nacional, Ecuador

2015 Sep. - 2016 Feb. Teaching assistant, *Atomic and Molecular Physics (laboratory)*, Physics Department, Escuela Politécnica Nacional, Ecuador

2015 Sep. - 2016 Feb. Teaching assistant, *Electromagnetism (laboratory)*, Physics Department, Escuela Politécnica Nacional, Ecuador

PROFESSIONAL SERVICE

2024 Aug. - Member, *Euclid* mission, transients & supernovae group

2024 May. - Member, *Einstein Probe* mission

2024 Feb. - Member, International Astronomical Union

2022 Feb. - Member, Fast X-ray transients Group, the Advanced X-ray Imaging Satellite (*AXIS*) mission

OBSERVING EXPERIENCE AND/OR ACCEPTED PROPOSALS¹

2025B (4.6 hours):	Fast Turnaround <i>GEMINI</i> South, GMOS, F2 instruments (Bauer-PI, Quirola co-PI)
2025B (40 hours):	<i>GTC</i> , OSIRIS/HiPERCAM/EMIR instruments (Jonker-PI, Quirola-Vásquez co-PI)
2025 (4 nights):	NTT telescope, EFOCS instrument, ePPESTO collaboration (Cosimo-PI)
2025 (8.5 hours):	Fast Turnaround <i>GEMINI</i> South, GMOS, F2 instruments (Bauer-PI, Quirola co-PI)
2024 (10.9 hours):	Fast Turnaround <i>GEMINI</i> Nort/South, GMOS, F2, GNIRS instruments (Bauer-PI, Quirola co-PI)
2025 (80 ksec):	<i>XMM-Newton</i> , JWST (4 hours), and VLT (2 hours) (Jonker PI, Quirola-Vásquez co-PI)
2024B (20 ks):	<i>Chandra</i> telescope ToO (Jonker PI, Quirola-Vásquez co-PI)
2024B (8 hours):	<i>SOAR</i> telescope ToO (Bauer PI, Quirola-Vásquez co-PI)
2024B (8.0 hours):	Fast Turnaround <i>GEMINI</i> Nort/South, GMOS, F2, GNIRS instruments (Bauer-PI, Quirola co-PI)
2024B (5.3 hours):	<i>GEMINI-North</i> , GMOS instrument (Bauer-PI, Quirola-Vásquez co-PI)
2024B (12.8 hours):	<i>GEMINI-South</i> , GMOS/F2 instruments, ToO (Bauer-PI, Quirola-Vásquez co-PI)
2024B (36 hours):	<i>GTC</i> , OSIRIS/HiPERCAM/EMIR instruments (Jonker-PI, Quirola-Vásquez co-PI)
2024 (12 ksec):	<i>Swift</i> -XRT telescope ToO (Jonker PI, Quirola-Vásquez co-PI)
2024A (6 hours):	<i>VLT</i> telescope ToO (Jonker PI, Quirola-Vásquez co-PI)
2024A (8 hours):	<i>SOAR</i> telescope ToO (Bauer PI, Quirola-Vásquez co-PI)
2024A (40 hours):	<i>GTC</i> , OSIRIS/HiPERCAM/EMIR instruments (Jonker-PI, Quirola-Vásquez co-PI)
2024 (8 hours):	<i>MeerKAT</i> Radio telescope (Bright PI, Quirola-Vásquez co-PI)
2023B (2 hours):	<i>GEMINI-South</i> telescope, GMOS instrument (Olivares PI, Quirola-Vásquez co-PI)
2023A (8 nights):	<i>BlackGEM</i> telescope, La Silla (visitor observer)
2023 (100 ksec):	<i>XMM-Newton</i> and VLT (Jonker PI, Quirola-Vásquez co-PI)
2022B (0.5 night):	<i>Baade</i> 6.5m telescope, FourStar instrument (Quirola-Vásquez PI)
2022B (4.5 hours):	<i>GTC</i> , OSIRIS instrument (Torres-PI, Quirola-Vásquez co-PI)
2022A (4 nights):	<i>Baade</i> 6.5m telescope, FourStar, FIRE and MagE instruments (Quirola-Vásquez PI)
2022A (12 hours):	<i>VLT</i> -Telescope, MUSE (Eappachen PI, Quirola-Vásquez co-PI)
2021B (12 hours):	<i>GEMINI-South</i> Telescope, GMOS instrument (Quirola-Vásquez PI)
2021B (2.5 hours):	<i>GEMINI-South</i> Telescope, Fast Turnaround, GMOS instrument (Bauer PI, Quirola-Vásquez co-PI ; CANCEL because of weather conditions)
2020B (13 hours):	<i>GEMINI-South</i> Telescope, F2 instrument (Quirola-Vásquez PI ; CANCEL by COVID-19)
2020A (2 nights):	<i>MPG/ESO 2.2m</i> Telescope, GROND instrument (Quirola-Vásquez PI)
2020A (6 hours):	<i>GEMINI-South</i> Telescope, GMOS instrument (Quirola-Vásquez PI)
2020A (5 hours):	<i>VLT</i> -Telescope, XSHOOTER instrument (Quirola-Vásquez PI)
2018B (1 night):	<i>Baade</i> 6.5m telescope, MagE instrument (Chilingarian PI)
2018B (1 night):	<i>Baade</i> 6.5m Telescope, MagE instrument (Chilingarian PI)
2018A (1 night):	<i>Baade</i> 6.5m Telescope, MagE instrument (Chilingarian PI)

PAPERS/PROPOSALS REFEREE

2025	<i>Astronomy & Astrophysics</i>
2025B	<i>Gemini-North/South</i> telescope, Fast Turnaround proposals
2025B	<i>Gemini-North/South</i> telescope, Fast Turnaround proposals
2025A	<i>Gemini-North/South</i> telescope, Fast Turnaround proposals
2024B	<i>Gemini-North/South</i> telescope, Fast Turnaround proposals
2024	<i>The Astrophysical Journal</i>
2024B	<i>Gemini-South</i> telescope, Fast Turnaround proposals
2023	<i>Neil Gehrels Swift Observatory</i> , Cycle 20
2023	<i>La Granja, revista de Ciencias de la Vida</i>
2023B	<i>Gemini-South</i> telescope, Fast Turnaround proposals
2021B	<i>Gemini-South</i> telescope, Fast Turnaround proposals
2020B	<i>Gemini-South</i> telescope, Fast Turnaround proposals

¹Highlighted the proposal where I contributed significantly.

0. 2 additional first-author (corresponding author) papers in preparation + 2 co-author papers submitted.
1. Jonker et al. (2025), *EP 250207b is not a collapsar fast X-ray transient. Is it due to a binary compact object merger?*, Monthly Notices of the Royal Astronomical Society (submitted; [arxiv](#)).
2. **Quirola-Vásquez J.** et al. (2025), *Unveiling the nature of the Einstein Probe transient EP 241021a*, Monthly Notices of the Royal Astronomical Society (submitted).
3. Levan et al. (2025), *The day-long, repeating GRB 250702BDE / EP250702a: A unique extragalactic transient*, ApJL (accepted; [arxiv](#)).
4. Biswas et al. (2025), *Comparing the Space Densities of Millisecond-Spin Magnetars and Fast X-Ray Transients*, A&A (accepted; [arxiv](#)).
5. Dai, **Quirola-Vásquez J.** et al. (2025), *An energetic dirty fireball detected in soft X-rays*, Science (submitted).
6. Rastinejad et al. (2025), *EP 250108a/SN 2025kg: Observations of the most nearby Broad-Line Type Ic Supernova following an Einstein Probe Fast X-ray Transient*, ApJL (accepted; [arxiv](#)).
7. Eyles-Ferris et al. (2025), *The kangaroo's first hop: the early fast cooling phase of EP250108a/SN 2025kg*, ApJL (submitted; [arxiv](#)).
8. van Jiang J. et al. (2025), *EP240801a/XRF 240801B: An X-ray Flash Detected by the Einstein Probe and Implications of its Multiband Afterglow*, Astrophysical Journal (accepted; [arxiv](#)).
9. Levan A. et al. (2025), *Fast X-ray transient EP240315A from a Lyman-continuum-leaking galaxy at $z \approx 5$* , Nature ([arxiv](#)).
10. van Dalen J. et al. (2025), *The Einstein Probe transient EP240414a: Linking Fast X-ray Transients, Gamma-ray Bursts and Luminous Fast Blue Optical Transients*, Astronomy & Astrophysics ([arxiv](#)).
11. Liu Y. et al. (2025), *Soft X-ray prompt emission from a high-redshift gamma-ray burst EP240315a*, Nature ([arxiv](#)).
12. **Quirola-Vásquez J.** et al. (2025), *New JWST redshifts for the host galaxies of CDF-S XT1 and XT2: understanding their nature*, Astronomy & Astrophysics ([arxiv](#)).
13. Inkenhaag A. et al. (2024), *Redshifts of candidate host galaxies of four fast X-ray transients using VLT/MUSE*, Astronomy & Astrophysics ([arxiv](#)).
14. Wichern H. C. I. et al. (2024), *Investigating the off-axis GRB afterglow scenario for extragalactic fast X-ray transients*, Astronomy & Astrophysics ([arxiv](#)).
15. **Quirola-Vásquez J.** et al. (2024), *Probing a Magnetar Origin for the population of Extragalactic Fast X-ray Transients detected by Chandra*, Astronomy & Astrophysics ([arxiv](#)).
16. Eappachen, D. et al. (2024), *XMM-Newton-discovered Fast X-ray Transients: Host galaxies and limits on contemporaneous detections of optical counterparts*, Monthly Notices of the Royal Astronomical Society ([arxiv](#)).
17. The AXIS Time-Domain and Multi-Messenger Science Working Group (2023), *Prospects for Time-Domain and Multi-Messenger Science with AXIS*, The Universe ([arxiv](#)).
18. **Quirola-Vásquez J.** et al. (2023), *Extragalactic fast X-ray transient candidates discovered by Chandra (2014-2022)*, Astronomy & Astrophysics, 675, 43 ([arxiv](#)).
19. Agudo, I. et al. (2023), *Panning for gold, but finding helium: discovery of the ultra-stripped supernova SN2019wxt from gravitational-wave follow-up observations*, Astronomy & Astrophysics, 675, 34 ([arxiv](#)).
20. Eappachen, D. et al. (2023), *The Fast X-ray Transient XRT 210423 and its Host Galaxy*, The Astrophysical Journal, 948, 91 ([arxiv](#)).
21. Eappachen, D. et al. (2022), *Probing for the host galaxies of the fast X-ray transients XRT 000519 and XRT 110103*, Monthly Notices of the Royal Astronomical Society, 514, 302 ([arxiv](#)).

22. **Quirola-Vásquez J.** et al. (2022), *Extragalactic fast X-ray transient candidates discovered by Chandra (2000-2014)*, Astronomy & Astrophysics, 663, A168 ([arxiv](#)).
23. Tucker, D. L. et al. (2022), *SOAR/Goodman Spectroscopic Assessment of Candidate Counterparts of the LIGO/Virgo Event GW190814*, The Astrophysical Journal, 929, 115, [arxiv](#)
24. Kilpatrick, Charles D. et al. (2021), *The Gravity Collective: A Search for the Electromagnetic Counterpart to the Neutron Star-Black Hole Merger GW190814*, The Astrophysical Journal, 923, 258, [arxiv](#)
25. Ackley, K. et al. (2020), *Observational constraints on the optical and near-infrared emission from the neutron star-black hole binary merger candidate S190814bv*, Astronomy & Astrophysics, 643, A113, [arxiv](#)
26. Garcia, A. et al. (2020), *A DESGW Search for the Electromagnetic Counterpart to the LIGO/Virgo Gravitational-wave Binary Neutron Star Merger Candidate S190510g*, The Astrophysical Journal, 903, 75, [arxiv](#)
27. Morgan, R. et al. (2020), *Constraints on the Physical Properties of GW190814 through Simulations Based on DECam Follow-up Observations by the Dark Energy Survey*, The Astrophysical Journal, 901, 83, [arxiv](#)
28. **Quirola-Vásquez J.** et al. (2019), *The exceptional X-ray evolution of SN 1996cr in high resolution*, Monthly Notices of the Royal Astronomical Society, 490, 4536 ([arxiv](#)).
29. **Quirola-Vásquez, J.** et al. (2019), *Spectropolarimetry of SN 2010jl*, Boletín de la Asociación Argentina de Astronomía La Plata Argentina, 61, 90 ([link](#))
30. **Quirola-Vásquez, J.** & Vásquez, N. (2015), *Study of pulse structure and radiative mechanisms associations of long GRBs at $z \sim 1$* , Extragalactic Jets from Every Angle, 313, 394 ([link](#))

SELECTED TALKS

2025 March:	ESLAB Euclid symposium 2025 (The Netherlands), “The role of Euclid mission for the detection of host galaxies of Fast X-ray Transients”
2025 January:	II Simposio de Física Teórica y Computacional (Ecuador), “The new era of extragalactic Fast X-ray Transients”
2024 October:	V Congreso Internacional de Física CIF 2024 (online), “The new era of extragalactic Fast X-ray Transients”
2024 October:	High Energy Astrophysics and Cosmology in the era of all-sky surveys (Armenia), “The new era of extragalactic Fast X-ray Transients”
2024 July:	European Astronomical Society meeting 2024 (Italy), “A new population of extragalactic fast X-ray transients”
2024 March:	AXIS seminar series (online), “Fast X-ray Transients: current status and future”
2023 October:	XVII Encuentro de Física (Ecuador), “Multi-epoch spectropolarimetry of type IIIn SN 2010jl”
2023 August:	IX School of Astronomy and Astrophysics (Ecuador), “Multi-messenger Astronomy”
2023 March:	20th Divisional Meeting of the High Energy Astrophysics Division (online), “Extragalactic Fast X-ray Transient Candidates Discovered inside the CSC2”
2023 February:	Max Planck Institute for Extraterrestrial Physics, High energy group (online), “Extragalactic Fast X-ray Transient Candidates Discovered by Chandra”
2023 January:	Yachay Tech (Ecuador), “Extragalactic Fast X-ray Transient Candidates Discovered inside the CSC2”
2022 November:	SuperVirtual 2022 (online), “Extragalactic Fast X-ray Transient Candidates Discovered by Chandra”
2022 November:	Radboud University, Fast X-ray Transient meeting (online), “Extragalactic Fast X-ray Transient Candidates Discovered by Chandra”
2022 April:	Universidad San Francisco (Ecuador), “Extragalactic Fast X-ray Transient Candidates Discovered by Chandra”
2022 February:	University of California–Berkeley (online), UCB-wide Explosive Astro meeting, “Extragalactic Fast X-ray Transient Candidates Discovered by Chandra”
2022 January:	SRON Netherlands Institute for Space Research (online), 50 years astronomical X-ray spectroscopy in the Netherlands, “The Exceptional X-ray Evolution of SN1996cr in High Resolution”

2021 July:	Sixteenth Marcel Grossmann Meeting (online), “Extragalactic Fast X-ray Transient Candidates Discovered by <i>Chandra</i> ”
2020 October:	<i>Chandra</i> X-ray Center (online), <i>Chandra</i> Frontiers in Time-Domain Science, “The exceptional X-ray evolution of SN 1996cr in high resolution”
2020 October:	<i>Chandra</i> X-ray Center (online), <i>Chandra</i> Frontiers in Time-Domain Science, “Extragalactic Fast X-ray Transient Candidates Hidden in the <i>Chandra</i> Source Catalog”
2019 December:	University of Portsmouth (UK), 30th Texas Symposium on Relativistic Astrophysics, “X-ray transients hidden in the <i>Chandra</i> X-ray Catalogs”
2019 December:	Escuela Politécnica Nacional, Ecuador, XVI Encuentro de Física: Desafíos Computacionales en la Física Contemporánea, “Multi-messenger astronomy”
2019 June:	Universidad Andres Bello (Chile), Supernovae-transients mini-workshop Japan-Chile, “Ongoing projects: merger of neutron stars in the <i>Chandra</i> catalog, SN1996cr and SN2010jl”
2018 October:	Second Binational Meeting AAA-SOCHIAS (Chile), “The Exceptional X-ray Evolution of SN 1996cr in High Resolution”
2018 May:	Institut de recherche en astrophysique et planétologie (France), Treasures hidden in high energy catalogues, “The exceptional X-ray evolution of SN1996cr in high resolution”
2018 April:	European South Observatory (Chile), South American Supernovae meeting, “High resolution X-ray spectroscopy of SN1996cr”
2018 January:	Millennium Institute of Astrophysics (Chile), IV Workshop MAS, “SN 1996cr: unprecedented supernova X-ray spectroscopy”
2015 August:	Universidad de Los Andes (Colombia), I Astronomy workshop in Los Andes, “Time and spectral study of the internal structure of long GRBs with $z\sim 1$ ”
2014 December:	Universidad de Nariño (Colombia), IV Colombian Congress of Astronomy & Astrophysics, “Study of spectral lag of long GRBs with similar redshift ($z\sim 1$)”

CONFERENCE/MEETING/WORKSHOP ORGANIZING COMMITTEES

2025	Local co-organizer, <i>The 46th International School for Young Astronomers ISYA</i> , Yachay Tech, Ecuador
2023	Organizer, <i>IX School of Astronomy and Astrophysics</i> , Astronomical Observatory of Quito
2023	Organizer, <i>Series of Colloquia: #AstroCharlas 2023</i> , Astronomical Observatory of Quito

SUPERVISIONS/MENTORING

2024 Apr. - 2024 Oct.	Jesse Crans, undergraduate student, internship, Radboud University
2023 Mar. - Present	Jennifer Chacón Chávez, doctoral student, Pontificia Universidad Católica de Chile
2024 Jan. - 2025 Feb.	Nicolás Noriega, Undergraduate Thesis, Escuela Politécnica Nacional, Ecuador
2024 Jan. - 2025 Feb.	Esteban Cardenas, Undergraduate Thesis, Escuela Politécnica Nacional, Ecuador
2021 Nov. - 2022 Aug.	Jennifer Chacón Chávez, Undergraduate Thesis, Escuela Politécnica Nacional, Ecuador

FELLOWSHIPS AND AWARDS

2024	Gruber Foundation–IAU Fellowship in Astrophysics
2023	Pontificia Universidad Católica de Chile, the Best PhD thesis award 2023
2019	SOCHIAS, Adelina Gutierrez fellowship
2018	Agencia Nacional de Investigación y Desarrollo de Chile, Doctoral student fellowship

PRESS

2024	<i>IAU</i> , “Gruber fellowships awards 2024”, Link .
2024	<i>PUC</i> , “Doctor del Instituto de Astrofísica UC recibió beca internacional: fue reconocido por la Fundación Gruber y la IAU”, Link .
2024	<i>EPN</i> , “Investigador del Observatorio Astronómico de la Escuela Politécnica Nacional recibe galardón internacional”, Link .
2023	<i>PUC</i> , “UC graduo a 180 nuevos doctores y doctoras este 2023”, Link .
2022	<i>Nature</i> , “Newfound X-ray flashes might shed light on their own origins”, Link .
2022	<i>Astronomy & Astrophysics</i> , “Extragalactic fast X-ray transient candidates discovered by <i>Chandra</i> (2000-2014)”, Link .

REFERENCES

Prof. Peter Jonker, Radboud University, p.jonker@astro.ru.nl

Prof. Franz E. Bauer, Pontificia Universidad Católica de Chile, fbauer@astro.puc.cl

Prof. Andrew Levan, Radboud University, a.levan@astro.ru.nl