

Rogério Monteiro-Oliveira *Ph.D.*

Observational Astrophysicist

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🌀 large scale structure assembly 🌀 galaxy clusters 🌀 superclusters of galaxies 🌀 galaxy evolution 🌀 weak gravitational lensing

🆔 ORCID 📄 ADS 🏠 Google Scholar R⁶ ResearchGate in LinkedIn

🏛️ Current Position

National Observatory (Observatório Nacional, ON/MCTI)

Research fellow (Pesquisador Adjunto I)

2025 –
Rio de Janeiro, Brazil

State University of Santa Cruz (UESC)

Member of the graduate program in Physics

2020 –
Ilhéus, Brazil

📁 Work Experience

Academia Sinica Institute of Astronomy and Astrophysics (ASIAA)

Postdoc fellow

> Research, outreach

2021 – 2025
Taipei, Taiwan

State University of Santa Cruz (UESC)

Visiting Professor

> Teaching, research, outreach

2020 – 2021
Ilhéus, Brazil

University of São Paulo - Institute of Astronomy, Geophysics and Atmospheric Sciences (IAG/USP)

Assistant Professor

> Teaching

2020 – 2020
São Paulo, Brazil

University of São Paulo - Institute of Astronomy, Geophysics and Atmospheric Sciences (IAG/USP)

Postdoc fellow

> Research, outreach

2016 – 2020
São Paulo, Brazil

Federal University of Rio Grande do Sul - Astronomy Department of the Institute of Physics (IF/UFRGS)

Assistant Professor

> Teaching, research, outreach

2017 – 2018
Porto Alegre, Brazil

🎓 Education

Ph.D. in Astronomy

University of São Paulo - Institute of Astronomy, Geophysics and Atmospheric Sciences (IAG/USP)

> Thesis: *Uma contribuição ao estudo de aglomerados de galáxias em fusão* (A contribution to the study of merging galaxy clusters)

> Advisor: Prof. Eduardo S. Cypriano

> Funded by Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq)

2011 – 2016
São Paulo, Brazil

M.S. in Astronomy

University of São Paulo - Institute of Astronomy, Geophysics and Atmospheric Sciences (IAG/USP)

> Thesis: *Aglomerados de galáxias em fusão* (Merging galaxy clusters)

> Advisor: Prof. Eduardo S. Cypriano

> Funded by Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES)

2009 – 2011
São Paulo, Brazil

B.S. in Physics

University of São Paulo - Institute of Physics (IFUSP)

> Monograph: *Geografia e ecologia das galáxias em superaglomerados* (Geography and ecology of galaxies in superclusters)

> Advisor: Prof. Laerte Sodré Jr.

2022 –
São Paulo, Brazil

👥 Major Collaborations

PFS Sumire

Member

2022 –

LSST

Member

2021 –

Javalambre Physics of the Accelerating Universe (JPAS)

Member

2009 –

Hyper Suprime Camera Survey

Member

2021 – 2025

Ultimate Subaru

Member

2024 – 2025

👤 Community Service

SOAR Telescope	2025 –
<i>Member of the Brazilian Time Allocation Committee</i>	
International Journal of Machine Learning and Cybernetics	2024 –
<i>Paper referee</i>	
HST Call for Proposals (Cycle 31)	2023
<i>Reviewer</i>	
James C. Maxwell Telescope Time Allocation Committee	2022
<i>Reviewer</i>	
The Astrophysical Journal	2019 –
<i>Paper referee</i>	
Monthly Notices of the Royal Astronomical Society	2019 –
<i>Paper referee</i>	

🌙 Accepted Proposals for Observation

👤 PI

- > Gemini (5.4 h @ GMOS/S): Testing Molecular Gas Scaling Relations in $z \sim 1.4$ Galaxy Clusters with ALMA and Gemini. 2026.
- > Subaru (2 h @ HSC): The Missing Clock in Cosmic Colliders: Dating Five Massive eRASS1 Mergers via Subaru/HSC Weak Lensing. 2026.
- > Blanco (2.5 nights @ DECam): The Missing Clock in Cosmic Colliders: DECam Weak Lensing Calibration of Seven eROSITA Cluster Mergers. 2026.
- > Blanco (1/2 night @ DECam): Decoding the Merger Dynamics of PSZ2 G277.93+12.34 with DECam. 2026.
- > Blanco (1/2 night @ DECam): Mapping Dark Matter in a Rare, Complex Triple Radio Relic Cluster. 2025.
- > Magellan/Clay (1 night @ MegaCam): Weak Lensing Follow-up of Massive Merging Clusters Recently Discovered by eROSITA All-Sky Survey Data Release 1. 2025.
- > Magellan/Baade (1 night @ IMACS): Unveiling Dark Matter in Massive Merging Clusters Revealed by eROSITA All-Sky Survey Data Release 1. 2025.
- > Subaru (7.3 h @ HSC): Mapping the dark matter distribution in highly massive merging clusters newly discovered by eROSITA. 2025.
- > Magellan/Baade (1 night @ IMACS): Weak lensing mass reconstruction of a sample of highly disturbed merging clusters recently discovered by eROSITA. 2024.
- > Blanco (1.5 nights @ DECam): Weak lensing mass reconstruction of a sample of highly disturbed merging clusters recently discovered by eROSITA. 2024.
- > Magellan/Clay (0.5 night M2FS): Scaling up our understanding of large structure formation: connecting the BCGs to superclusters. 2023.
- > CFHT (1.3 h @ WIRCam): Are high redshift ($z > 1.4$) galaxy cluster detections real? 2023.
- > CFHT (2.6 h @ WIRCam): Breaking the natural barrier: detecting galaxy clusters at $z > 1.4$. 2022.
- > CFHT (13.6 h @ MegaCam): Reconstruction of the mass field in Hercules supercluster using weak gravitational lensing. 2022.
- > Gemini (28.5 h @ GMOS/S): Witnessing the formation of the large-scale structure: a dynamical study of massive galaxy clusters undergoing extreme mergers. 2021.
- > Gemini (7.7 h @ GMOS/S): Imaging and spectroscopy of the merging galaxy cluster candidate SPT-CL J0411. 2017.
- > Gemini (3.5 hours @ GMOS/S): Spectroscopy follow up of the merging galaxy cluster A2034. 2013.

👤 Corresponding author

- > Gemini (12.6 h @ GMOS/N): Do the BCGs born special or do they become it? PI: R. Dalal. 2023.
- > Gemini (3.9 h @ GMOS/N): Witnessing the birth of a giant: spectroscopic observations of the merging galaxy cluster A1758S. PI: R. Machado. 2023.
- > Blanco (1 night @ DECam): Investigating a bullet-like merging galaxy cluster caught in an early phase of interaction. PI: E. Cypriano. 2022.
- > Gemini (22.9 h @ GMOS/N): First Characterization of Superclusters detected in the Subaru Hyper Suprime-Cam Survey. PI: R. Dalal. 2022.

👤 Co-PI

- > Gemini (14.1 h @ GMOS/S and 16.1 h @ GMOS/N): Dynamics of eROSITA Merging Clusters: Insights into Dark Matter and Galaxy Evolution. PI: R. Carrasco. 2026.
- > JWST Cycle 3 (22.4 h @ NIRSPEC NIRCAM): Measuring the form of the IMF in passive galaxies at $z \sim 1.2$.
- > Magellan/Baade (1 night @ FourStar): BCGs: Nature vs. Nurture? PI: R. Dalal. 2024.
- > HST Cycle 30 (5 orbits @ ACS/WFC): Clash of Titans: Characterizing SPT-CLJ0307-6225, a major merger in the plane of the sky. PI: A. Zenteno. 2022.
- > Gemini (5.5 h @ GMOS/S): A dynamical study of massive galaxy clusters at $z > 0.6$ undergoing extreme mergers. PI: R. Carrasco. 2022.
- > Gemini (6.5 h @ GMOS/S): Follow-up of the newly discovered cluster J2305-2248, an “El Gordo” lookalike. PI: E. Cypriano. 2022.

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- > MMT (1 night @ MMIRS): Exploration of star formation activity in galaxy clusters at $z \sim 1.5$. PI: Y.-T. Lin. 2022.
- > Blanco (1 night @ DECam): Evolving galaxies in evolving environments: Searching for jellyfish galaxies in merging clusters. PI: K. Kelkar. 2022.
- > GMRT (8 h): Diffuse radio emission from the sloshing cluster Abell 1644 and its connection to ram-pressure stripping. PI: K. Kelkar. 2022.
- > CFHT (11.5 h @ MegaCam): Weak lensing mass reconstruction of the supercluster of galaxies SC0028-0001. PI: G. Lima Neto. 2010.

📖 Student Advising

Elvis Mello-Terencio » Ph.D. student (ON/MCTI) > Investigating the impact of weak lensing mass bias on determining the age of merging galaxy clusters	2026-
Giovanna Oliveira » Undergraduate student (IFF; ON/MCTI) > Gravitational Lensing with JWST: A New Era in Cosmic Mass Mapping	2025-2026
Ryusei Kano » Summer student program (ASIAA) > The power of a semi-analytical 2-body description for describing galaxy cluster merger	2024
Dionysios Gakis » Summer student program (ASIAA) > Anatomy of a giant: investigating environment effects in the Saraswati supercluster	2022
Vitor Hugo Yukio Fugivala » Master's student (UESC) > Structure and dynamics of the Hercules supercluster	2022 - 2024
Thierry Oliveira Candido » Undergraduate student (Federal Institute of Mato Grosso do Sul) > Mapping the Universe in large scale	2019 - 2020
Ronaldo Roca Flores » Undergraduate student (Federal Institute of Mato Grosso do Sul) > Mapping the Universe in large scale	2019 - 2020

📖 Teaching

UESC » Professor 2 Physics courses	2020 - 2021
IAG/USP » Professor 2 Astronomy courses	2020
IF/UFRGS » Professor 5 Astronomy courses	2017 - 2018
IAG/USP » Teaching assistant 6 Astronomy courses	2012 - 2015
University Braz Cubas » Lecturer 1 Physics course	2011

💬 Colloquia & Seminars

Federal University of Espírito Santo (Cosmo-UFES), Vitória, Brazil » Invited Seminar > Extreme Cosmic Collisions: What Merging Galaxy Clusters Reveal About the Nature of Dark Matter?	Oct., 2025
Valongo Observatory (OV/UFRJ), Rio de Janeiro, Brazil » Invited Seminar > Breaking the Dichotomy: MaNGA's Insights into Elliptical Galaxy Classification	Jun., 2025
Korea Astronomy and Space Science Institute (KASI), Daejeon, Korea » Invited Seminar > A Review of Elliptical Galaxy Classification: Ruling Out the Dichotomy Scenario	Nov., 2024
National Institute of Physics, Quezon City, Philippines » Invited Seminar > Merger of Galaxy Clusters: The Largest Particle Colliders in the Universe and Their Implications for Micro and Macro Physics	Oct., 2024
Istituto Nazionale di Fisica Nucleare, Turin, Italy	Oct., 2023

- » Weekly Seminar
- > Seeing the micro through the macro: collisions among galaxy clusters and their impact on dark matter properties investigation
- National Central University, Taoyuan, Taiwan** Oct., 2022
- » Weekly Colloquia
- > Connecting Macro to Micro: How can studying the largest structures in the universe help us unveil the nature of dark matter?
- ASIAA, Taipei, Taiwan** Nov., 2021
- » Weekly Colloquium
- > Galaxy Clusters: the Largest Laboratories in the Universe
- UESC, Ilhéus, Brazil** Jun., 2018
- » Special Seminar
- > Aglomerados de galáxias: os maiores laboratórios do Universo
- Universidade Cruzeiro do Sul, São Paulo, Brazil** May 2018
- » Weekly Seminar
- > C.S.I. (Cluster Science Investigation): solving the case of a cosmic crash
- IF/UFRGS, Porto Alegre, Brazil** Jun., 2017
- » Weekly Seminar
- > Unveiling the Universe dark side through the merging galaxy clusters

📄 Conferences

- 2nd LSST Latin American Meeting** Dec., 2025
- 📍 Mexico City, Mexico 🗣️ Linking Morphology and Kinematics: Can We Trust the Elliptical Galaxy Dichotomy? (oral contribution)
- XLVIII Annual Meeting of the Brazilian Astronomical Society** Sep., 2025
- 📍 Caxambu, Brazil 🗣️ Challenging the Dichotomy of Elliptical Galaxies with MaNGA (oral contribution)
- Galaxy Memoirs: Inferring their Past from their Present** Aug., 2025
- 📍 Armação dos Búzios, Brazil 🗣️ Revisiting Elliptical Galaxies: No Evidence for a Dichotomy (oral contribution)
- 11th KIAS Workshop on Cosmology and Structure Formation** Oct., 2024
- 📍 Gyeongju, Korea 🗣️ No evidence of a dichotomy in the elliptical galaxy population (poster) & The impact of weak lensing mass bias on the kinematic description of merging galaxy clusters (oral contribution)
- 10th Galaxy Evolution Workshop** Aug., 2024
- 📍 Taipei, Taiwan 🗣️ Can the dichotomy scenario explain the observed variety of elliptical galaxies? (oral contribution)
- The Second SUPER-IRNET Workshop: Sparkling Our Collaboration at the Cosmic Gate** Jul., 2024
- 📍 Beppu, Japan 🗣️ Breaking the natural barrier: how reliable is cluster detection beyond $z = 1.4$? (oral contribution)
- Galaxy Groups in the Era of eROSITA and Euclid** Jul., 2024
- 📍 Sesto, Italy 🗣️ From photons to bytes: combining multiple wavelengths and numerical simulations to describe the large scale structure formation (oral contribution)
- First Structures in the Universe** Jun., 2024
- 📍 Paris, France 🗣️ Are the detections of galaxy clusters at $z > 1.5$ real? (oral contribution)
- Taipei Astronomy Workshop** Jan., 2024
- 📍 Taipei, Taiwan 🗣️ Do normality tests serve as effective indicators for the dynamical state of galaxy clusters? (oral contribution)
- Annual Meeting of the Physical Society of Taiwan** Jan., 2024
- 📍 Taoyuan, Taiwan 🗣️ Beyond Hubble's Tuning Fork: is the classification of elliptical galaxies more complex than we thought?
- A journey through galactic environments: From the halo assembly bias to the satellite quenching** Sep., 2023
- 📍 Porto Ercole, Italy 🗣️ Is the taxonomy of early-type galaxies more complicated than we thought?
- NECO school: science and methods for wide-field photometric and spectroscopic extragalactic and cosmological surveys** Ago., 2023
- 📍 Kyoto, Japan 🗣️ Beyond Hubble's Tuning Fork: is the classification of elliptical galaxies more complex than we thought? (oral contribution)
- Asia-Pacific Regional IAU Meeting (APRIM 2023)** Aug., 2023
- 📍 Koriyama, Japan 🗣️ Is the classification of early-type galaxies more complex than we thought?
- Asia-Pacific Regional IAU Meeting (APRIM 2023)** Aug., 2023
- 📍 Koriyama, Japan the massive Saraswati supercluster going to disappear in the future?
- Annual Meeting of the Astronomical Society of the Republic of China (Taiwan)** May, 2023
- 📍 Kaohsiung, Taiwan 🗣️ Investigating the dichotomy among early-type galaxies
- PFS Science meeting** Mar., 2023
- 📍 Remote 🗣️ Is the dichotomy among early-type galaxies real?
- 9th Galaxy Evolution Workshop** Feb., 2023
- 📍 Kashiwa, Japan 🗣️ Is the dichotomy among early-type galaxies real?

Annual Meeting of the Astronomical Society of the Republic of China (Taiwan) 📍 Minxiong, Taiwan 🗣️ A major galaxy cluster merger caught by eROSITA	Sep., 2022
Annual Meeting of the Physical Society of Taiwan 📍 Taipei, Taiwan 🗣️ Witnessing the birth of the large-scale structure: anatomy and dynamical analysis of Hercules supercluster	Jan., 2022
Galaxy Cluster Formation II 📍 Remote 🗣️ Peculiar features arising from merging galaxy clusters: the case of A1644 and A2034	Jun., 2021
JSPS-FAPESP Workshop on dark energy, dark matter, and galaxies 📍 São Paulo, Brazil 🗣️ Merging galaxy clusters and the search for self-interacting dark matter (oral contribution)	Feb., 2019
SnowCluster - The Physics of Galaxy Clusters 📍 Salt Lake City, USA 🗣️ Unveiling the dark side of the Universe through the merging galaxy clusters	Mar., 2018
ICTP-SAIFR School on Dark Matter 📍 São Paulo, Brazil	Jul., 2016
IAU General Assembly Meeting 📍 Honolulu, USA 🗣️ The merging cluster Abell 1758: an optical and dynamical view	Aug., 2015
10th J-PAS Collaboration Meeting 📍 Paraty, Brazil 🗣️ The merging cluster Abell 1758: adding new pieces into a complex puzzle	Mar., 2015
Cosmology with Galaxy Clusters 📍 Madrid, Spain 🗣️ The merging cluster Abell 1758: adding new pieces into a complex puzzle	Nov., 2014
XXXVIII Annual Meeting of the Brazilian Astronomical Society 📍 Búzios, Brazil 🗣️ The merging cluster Abell 1758	Sep., 2014
GMT Science Workshop 📍 São Paulo, Brazil 🗣️ The merging cluster 1758	Nov., 2013
SnowCLUSTER: Physics of Galaxy Clusters 📍 Salt Lake City, USA 🗣️ Dynamical Analysis of the Merging Cluster Abell 1758	Mar., 2013
USP Conference: Cosmology, large scale structure and first objects 📍 São Paulo, Brazil 🗣️ The merging cluster 1758	Feb., 2013
XVI IAG/USP Advanced School on Astrophysics 📍 Itatiba, Brazil 🗣️ The merging cluster Abell 1758	Nov., 2012
XXXVII Annual Meeting of the Brazilian Astronomical Society 📍 Águas de Lindóia, Brazil 🗣️ The merging cluster Abell 1758	Oct., 2012
Growing up at high redshift: from proto-clusters to galaxy clusters workshop 📍 Madrid, Spain 🗣️ A multi-technique analysis of the merging cluster Abell 1758	Sep., 2012
Science with LSST: A Brazilian/US joint workshop 📍 Campos do Jordão, Brazil 🗣️ Merging galaxy clusters	Apr., 2012
South American Gemini Data Workshop 📍 São José dos Campos, Brazil 🗣️ Merging galaxy clusters	Oct., 2011
XXXVI Annual Meeting of the Brazilian Astronomical Society 📍 Águas de Lindóia, Brazil 🗣️ Merging galaxy clusters	Sep., 2011
XXXV Annual Meeting of the Brazilian Astronomical Society 📍 Passa Quatro, Brazil 🗣️ Merging galaxy clusters	Sep., 2010
I Jayme Tiomno School of Cosmology 📍 Rio de Janeiro, Brazil 🗣️ Merging galaxy clusters	Jul., 2010

📖 Papers (published)

26. **Monteiro-Oliveira, R.**, 2026. Universe, 12(8), 249. [Merging Galaxy Clusters and the Search for New Physics of Dark Matter: A Review](#)
25. Chiu, I-N., Ghirardini, V., Grandis, S., Okabe, Bulbul, E., Bahar, Y. E., Balzer, F., Clerc, N., Comparat, J., Kleinebreil, F., Kluge, M., Liu, A., **Monteiro-Oliveira, R.**, et al., 2025, A&A, 704, A110. [The SRG/eROSITA All-Sky Survey. The Weak-Lensing Mass Calibration and the Stellar Mass-to-Halo Mass Relation from the Hyper Suprime-Cam Subaru Strategic Program](#)
24. Okabe, N., Reiprich, T., Grandis, S., Chiu, I-N., Oguri, M., Umetsu, K., Bulbul, E., Bahar, E., Balzer, F., Clerc, N., Comparat, J., Ghirardini, V., Kleinebreil, F., Kluge, M., Liu, A., Lin, Y-T., **Monteiro-Oliveira, R.**, et al., 2025, A&A, 700, A46. [The SRG/eROSITA All-Sky Survey : Subaru/HSC-SSP weak-lensing mass measurements for the eRASS1 Galaxy Clusters](#)
23. **Monteiro-Oliveira, R.**, Lin, Y-T., Chen, W-H., Chuang, C-Y., Abdurro'uf, Wu, P-F., 2025, ApJ, 988, 138. [No Evidence of a Dichotomy in the Elliptical Galaxy Population](#)
22. Zenteno, A., Kluge, M., Kharkrang, R., Hernandez-Lang, D., Damke, G., Saro, A., **Monteiro-Oliveira, R.**, et al., 2025, A&A, 698, A171. [The dynamical state of eROSITA clusters and its impact on the brightest cluster galaxy luminosity](#)

21. Ding, J., Dalal, R., Sunayama, T., Strauss, M. A., Oguri, M., Okabe, N., Hilton, M., **Monteiro-Oliveira, R.**, Sifón, C., Staggs, S. T., 2024, MNRAS, 536, 572. [Miscentring of optical galaxy clusters based on Sunyaev-Zeldovich counterparts](#)
20. Chen, T.-C., Lin, Y.-T., Schive, H.-Y., Oguri, M., Chen, K.-F., Okabe, N., Ali, S., Bottrell, C., Dalal, R., Koyama, Y., **Monteiro-Oliveira, R.**, et al., 2024, ApJ, 975, 200. [A Systematic Search of Distant Superclusters with the Subaru Hyper Suprime-Cam Survey](#)
19. Machado, R. E. G., Volert, R. C., Albuquerque, R. P., **Monteiro-Oliveira, R.**, Lima Neto, G. B., 2024, ApJ, 970, 160. [Simulating the Arrival of the Southern Substructure in the Galaxy Cluster Abell 1758](#)
18. Albuquerque, R. P., Machado, R. E. G., **Monteiro-Oliveira, R.**, 2024, MNRAS, 530, 2146. [Unravelling the collision scenario of the dissociative galaxy cluster Abell 56 through hydrodynamic simulations](#)
17. Hernández-Lang, D., Zenteno, A., Díaz-Ocampo, A., Cuevas, H., Clancy, J., Prado P. H., Aldás, F., Pallero, D., **Monteiro-Oliveira, R.**, et al., 2022, MNRAS, 517, 4355. [Clash of Titans: A MUSE dynamical study of the extreme cluster merger SPT-CL J0307-6225](#)
16. **Monteiro-Oliveira, R.**, 2022, MNRAS, 515, 3674. [A major galaxy cluster merger caught by eROSITA: weak lensing mass distribution and kinematic description](#)
15. **Monteiro-Oliveira, R.**, Morell, D. F., Sampaio, V. M., Ribeiro, A. L. B., de Carvalho, R. R., 2022, MNRAS, 509, 3470. [Unveiling the internal structure of Hercules supercluster](#)
14. Bonoli, S. + 163 co-authors, **Monteiro-Oliveira, R.**, et al., 2021, A&A, 653, A31. [The miniJPAS survey: a preview of the Universe in 56 colours](#)
13. **Monteiro-Oliveira, R.**, Soja, A. C., Ribeiro, A. L. B., Bagchi, J., Sankhyayan, S., Candido, T. O., Flores, R. R., 2021, MNRAS, 501, 756. [Probing Saraswati's heart: evaluating the dynamical state of the massive galaxy cluster A2631 through a comprehensive weak lensing and dynamical analysis](#)
12. Moura, M. T.; Machado, R. E. G., **Monteiro-Oliveira, R.**, 2021, MNRAS, 500, 1858. [Simulations of the merging galaxy cluster Abell 2034: what determines the level of dissociation](#)
11. Kelkar, K., Dwarakanath K. S., Poggianti B. M., Moretti A., **Monteiro-Oliveira, R.**, et al., 2020, MNRAS, 496, 442. [Passive spirals and shock influenced star formation in the merging cluster Abell 3376](#)
10. Doubrawa, L., Machado, R. E. G., Laganá, T. F., Lima Neto, G. B., **Monteiro-Oliveira, R.**, Cypriano, E. S., 2020, MNRAS, 495, 2022. [Simulations of gas sloshing induced by a newly discovered gas poor substructure in galaxy cluster Abell 1644](#)
9. **Monteiro-Oliveira, R.**, Doubrawa, L., Machado, R. E. G., Lima Neto, G. B., Molina, M. C.; Cypriano, E. S., 2020, MNRAS, 495, 2007. [Revising the merger scenario of the galaxy cluster Abell 1644: a new gas poor structure discovered by weak gravitational lensing](#)
8. Mendes de Oliveira, C. L., + 118 authors, **Monteiro-Oliveira, R.**, et al., 2019, MNRAS, 489, 241. [The Southern Photometric Local Universe Survey \(S-PLUS\): improved SEDs, morphologies, and redshifts with 12 optical filters](#)
7. Molino, A., Costa-Duarte, M.V., Mendes de Oliveira, C., Lima Neto, G. B., Cypriano, E. S., Sodrê Jr, L., Coelho, P., Chow-Martínez, M., **Monteiro-Oliveira, R.**, et al., 2019, A&A, 622, A178. [J-PLUS: On the identification of new cluster members in the double galaxy cluster A2589 & A2593 using PDFs](#)
6. Mahadev, P., **Monteiro-Oliveira, R.**, Bagchi, J., Simionescu, A., Limousin, M., Raychaudhury, S., 2019, MNRAS, 482, 5093. [A combined X-ray, optical and radio view of the merging galaxy cluster MACS J0417-1154](#)
5. **Monteiro-Oliveira, R.**, Cypriano, E. S., Vitorelli, A. Z., Ribeiro, A. L. B., Sodrê, L., Dupke, R., Mendes de Oliveira, C. L., 2018, MNRAS, 481, 1097. [New insights on the dissociative merging galaxy cluster Abell 2034](#)
4. Soja, A. C., Sodrê, L., **Monteiro-Oliveira, R.**, Cypriano, E. S., Lima Neto, G. B., 2018, MNRAS, 477, 3279. [A Gemini view of the galaxy cluster RXC J1504-0248: insights on the nature of the central gaseous filaments](#)
3. **Monteiro-Oliveira, R.**, Lima Neto, G. B., Cypriano, E. S., Machado, R. E. G., Capelato, H. V., Laganá, T. F., Durret, F., Bagchi, J., 2017b, MNRAS, 468, 4566. [Weak lensing and spectroscopic analysis of the nearby dissociative merging galaxy cluster Abell 3376](#)
2. **Monteiro-Oliveira, R.**, Cypriano, E. S., Machado, R. E. G., Lima Neto, G. B., Ribeiro, A. L. B., Sodrê, L., Dupke, R., 2017a, MNRAS, 466, 2614. [The merger history of the complex cluster Abell 1758: a combined weak lensing and spectroscopic view](#)
1. Machado, R. E. G., **Monteiro-Oliveira, R.**, Lima Neto, G. B., Cypriano, E. S., 2015, MNRAS, 451, 3309. [Simulating the shocks in the dissociative galaxy cluster Abell 1758N](#)

📖 Conference Proceedings

3. **Monteiro-Oliveira, R.** Is the taxonomy of early-type galaxies more complicated than we thought? A Journey Through Galactic Environments: From the Halo Assembly Bias to the Satellite Quenching, 2023.
2. Fugivala, Vitor H. Y., **Monteiro-Oliveira, R.**, Ribeiro, A. L. B. Mapping the Hercules supercluster to understand large scale structure formation and environmental effects on galaxies. Proceedings of XLV Meeting of Brazilian Astronomical Society. 2022.
1. **Monteiro-Oliveira, R.** Peculiar features arising from merging galaxy clusters: the case of A1644 and A2034. Galaxy Cluster Formation II. 2021.

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📄 Papers (submitted)

2. Tam, S-I, Umetsu, K., Amara, A., Eckert, D., Regamey, M., Cerardi, N., Chiu, I-N., Sereno, M., Pacaud, F., Bhargava, S., Garrel, C., Gastaldello, F., Koulouridis, E., Maughan, B., **Monteiro-Oliveira, R.**, et al., 2026. Submitted to ApJ. [Simulation-Based Cosmological Mass Calibration of XXL Galaxy Clusters using HSC Weak Lensing](#)
1. Shimakawa, R., Shirasaki, M., Nishizawa, A.J., Osato, K., Horowitz, B., Galárraga-Espinosa, D., Verza, G., Pisani, A., Kashikawa, N., **Monteiro-Oliveira, R.**, et al., 2026. Submitted to MNRAS. Wide-field projected density mapping out to $z=1.2$ using the HSC-SSP Final Data Release and validation with early PFS-SSP Cosmology data

⚙️ Referees

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