Gabriela Sato-Polito

Curriculum Vitae

PERSONAL INFORMATION

Full Name: Gabriela Satie Sato-Polito
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School of Natural Sciences
Institute for Advanced Study
1 Einstein Drive
Princeton, NJ 08540, USA

EMPLOYMENT

Institute for Advanced Study, Postdoctoral Member

EDUCATION

Johns Hopkins University, Baltimore, MD, USA
PhD, Astrophysics, 2023
Advisor: Marc Kamionkowski

University of São Paulo, São Paulo, Brazil
Bachelor of Science, Molecular Sciences, August 2018

AWARDS AND FELLOWSHIPS

National Science Foundation Graduate Research Fellow
Dates: 2020 – present

Owen Fellowship Award; Johns Hopkins University
Dates: 8/2018 – 8/2020

Summer Undergraduate Research Fellowship; California Institute of Technology and Jet Propulsion Laboratory (JPL)
Dates: 6/2017 – 8/2017

Undergraduate Research Fellowship (Iniciação Científica); São Paulo Research Foundation (FAPESP)
Dates: 12/2016 – 2/2018

PROFESSIONAL SERVICE

Committee for Diversity and Inclusion, Department of Physics and Astronomy, Johns Hopkins University
Dates: 8/2021 – 8/2022

Peer review: ApJ, MNRAS

PROFESSIONAL DEVELOPMENT

Justice, Equity, Diversity and Inclusion Training, Krieger School of Arts Sciences and the Teaching Academy, Johns Hopkins University
Dates: 9/2021

OUTREACH

Physics Fair at the Department of Physics and Astronomy, JHU *2018, 2019*

Youth in Astronomy and Engineering at the Department of Physics and Astronomy, JHU *2019*

Physics demonstrations and portable planetarium at the Enoch Pratt Free Library, Baltimore, MD *2019*

SELECTED PUBLICATIONS

Metrics: 12 refereed journal publications (7 first-authored), +3 submitted, 200+ citations, h-index: 9

1. **Gabriela Sato-Polito**, Matias Zaldarriaga, Eliot Quataert. Where are NANOGrav's big black holes? arXiv:2312.06756, 2023. (submitted)
2. **Gabriela Sato-Polito**, Marc Kamionkowski. Exploring the spectrum of stochastic gravitational-wave anisotropies with pulsar timing arrays. arXiv:2305.05690, 2023. (submitted)
3. **Gabriela Sato-Polito**, Nickolas Kokron, José Luis Bernal. A multi-tracer empirically-driven approach to line-intensity mapping lightcones. Mon.Not.Roy.Astron.Soc. 526 (2023) 4, 5883–5899.
4. José Luis Bernal, Andrea Caputo, **Gabriela Sato-Polito**, Jordan Mirocha, and Marc Kamionkowski. Seeking dark matter with γ-ray attenuation. Phys.Rev.D 107 (2023) 10, 103046.
5. Neha Anil Kumar, **Gabriela Sato-Polito**, Marc Kamionkowski, Selim C. Hotinli. Primordial trispectrum from kSZ tomography. Phys.Rev.D 106 (2022) 6, 063533.
6. José Luis Bernal, **Gabriela Sato-Polito**, Marc Kamionkowski. The cosmic optical background excess, dark matter, and line-intensity mapping. Phys.Rev.Lett. 129 (2022) 23, 231301.
7. **Gabriela Sato-Polito**, José Luis Bernal. Analytical covariance between voxel intensity distributions and line-intensity mapping power spectra. Phys.Rev.D 106 (2022) 10, 103534.
8. **Gabriela Sato-Polito**, Marc Kamionkowski. Pulsar-timing measurement of the circular polarization of the stochastic gravitational-wave background. Phys.Rev.D 106 (2022) 2, 023004.
9. **Gabriela Sato-Polito**, José Luis Bernal, Kimberly K. Boddy, Marc Kamionkowski. Kinetic Sunyaev-Zel'dovich tomography with line-intensity mapping. Phys.Rev.D 103 (2021) 8, 083519.
10. **Gabriela Sato-Polito**, José Luis Bernal, Ely D. Kovetz, and Marc Kamionkowski. Antisymmetric cross-correlation of line-intensity maps as a probe of reionization. Phys. Rev. D 102 (2020) 4, 043519.
11. Antonio D. Montero-Dorta, M. Celeste Artale, L. Raul Abramo, Beatriz Tucci, Nelson Padilla, **Gabriela Sato-Polito**, Iván Lacerna, Facundo Rodriguez, and Raul E. Angulo. The manifestation of secondary halo bias on the galaxy population from IllustrisTNG300. Mon. Not. Roy. Astron. Soc. 496 (2020) 2, 1182-1196.
12. **Gabriela Sato-Polito**, Ely D. Kovetz, and Marc Kamionkowski. Constraints on the primordial curvature power spectrum from primordial black holes. Phys.Rev.D 100 (2019) 6, 063521.
13. **Gabriela Sato-Polito**, Antonio D. Montero-Dorta, L. Raul Abramo, Francisco Prada, and Anatoly Klypin. The dependence of halo bias on age, concentration and spin. Mon.Not.Roy.Astron.Soc. 487 (2019) 2, 1570-1579.

SELECTED TALKS

Present and Future of Line-Intensity Mapping, MPA	*4/2023*
IAS Cosmology Lunch	*12/2022*
MIT Brown Bag Lunch (invited)	*11/2022*
CfA seminar (invited)	*11/2022*
Ohio State University CCAPP seminar (invited)	*11/2022*
Perimeter Institute Cosmology Seminar (invited)	*10/2022*
UT Austin Theory Group Seminar (invited)	*9/2022*
LBNL/UC Berkeley Cosmology Seminar (invited)	*9/2022*
Stanford Cosmology Seminar (invited)	*9/2022*
BCCP Vipolže Workshop	*7/2022*
BCCP Reionization Workshop, UC Berkeley	*3/2022*

TEACHING

Electricity and Magnetism Laboratory	*Spring 2020*
Classical Mechanics Laboratory	*Fall 2019*
General Physics II for Physical Science Majors	*Spring 2019*
General Physics Laboratory II	*Spring 2019*
General Physics I for Biological Science Majors	*Fall 2018*
General Physics Laboratory I	*Fall 2018*

REFERENCES

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