Lennox Sama Keeble

Curriculum Vitae

Last updated: April 21, 2026

Education

Wake Forest University **2026 - 2031**
Doctor of Philosophy (Ph.D.) in Physics. Supervisor: Professor Cárdenas-Avendaño *Winston-Salem, USA*

University of Cambridge **2025 - 2026**
Master of Advanced Study (MASt) in Theoretical Physics *Cambridge, UK*

Princeton University **2020 - 2025**
Bachelor of Arts (B.A.) in Physics *Princeton, USA*

Honors, Scholarships & Awards

- Cambridge Trust Master's Studentship, University of Cambridge, 2025.
- Academic Futures Graduate Scholarship, University of Oxford, 2025.
- Allen G. Shenstone Prize in Physics, Princeton University, Department of Physics, 2025.
- Manfred Pyka Memorial Prize, Princeton University, Department of Physics, 2022.

Publication Summary

- **5** (submitted/accepted) refereed papers; **4** as lead author
- **Citations:** $>$ **80**; **h-index:** 5 (Google Scholar)
- **Papers by research area:** relativistic hydrodynamics (**2**); black hole imaging (**2**); extreme mass-ratio inspirals (**1**)
- Links to academic metrics: Google Scholar, INSPIRE

Invited Talks, Conferences & Workshops

bold **numbers** indicate a contributed talk, bold **text** indicates an invited talk

7. Relativistic Astrophysics Summer School, Caltech, 2025.
6. Nuclear Physics of MultiMessenger Mergers (NP3M) Summer School, Indiana University, 2025.
5. **Los Alamos Astrophysics Distinguished Seminar Series, Center for Nonlinear Studies, Los Alamos National Laboratory, 2025.**
4. Black Hole Mimickers: From Theory to Observation, Princeton Center for Theoretical Science & Princeton Gravity Initiative, 2025.
3. CU^{2}MIP Undergraduate Conference, College Park, USA, 2024.
2. American Physical Society April Meeting, 2024.
1. Taking it to the extreme: Symmetries and dynamics of extremal black holes, Princeton Center for Theoretical Science & Princeton Gravity Initiative, 2024.

Professional Experience

Investment Associate Intern **Summer 2024**
Bridgewater Associates *Westport, Connecticut, USA*

Summer Business Analyst **Summer 2022**
McKinsey & Company *San Francisco, California, USA*

Miscellaneous

Programming Languages: julia., Python, Mathematica & Slurm.
Web Links: Webpage, GitHub.

List of Publications

† indicates first-authored papers or alphabetical ordering

Refereed (submitted/accepted)

[5] *Radial Oscillations of Viscous Stars.*
†**L. S. Keeble** and J. Redondo-Yuste.
arXiv: 2603.23622 (gr-qc).

[4] *Estimating high-order time derivatives of Kerr orbital functionals.*
†**L. S. Keeble** and A. Cárdenas-Avendaño.
Physical Review D 112, 084048 (2025) arXiv: 2508.08888 (gr-qc).

[3] *Inferring black hole spin from interferometric measurements of the first photon ring: A geometric approach.*
†**L. S. Keeble**, A. Cárdenas-Avendaño, and D. C. M. Palumbo.
Physical Review D 111, 103042 (2025) arXiv: 2502.20312 (astro-ph.HE).

[2] *First-order viscous relativistic hydrodynamics on the two-sphere.*
†**L. S. Keeble** and F. Pretorius.
Physical Review D 112, 124034 (2025) arXiv: 2508.20998 (gr-qc).

[1] *Assessing the impact of instrument noise and astrophysical fluctuations on measurements of the first black hole photon ring.*
A. Cárdenas-Avendaño, **L. Keeble**, and A. Lupsasca.
Physical Review D 109, 124052 (2024) arXiv: 2404.01083 (gr-qc).

White Papers and Conference Proceedings

[1] *The Black Hole Explorer: photon ring science, detection, and shape measurement.*
A. Lupsasca, A. Cárdenas-Avendaño, D. C. M. Palumbo, M. D. Johnson, S. E. Gralla, D. P. Marrone, P. Galison, P. Tiede, and **L. Keeble**.
Proc. SPIE Int. Soc. Opt. Eng. 13092, 130926Q (2024) arXiv: 2406.09498 (gr-qc).