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Publications

- [1] M. Martinelli, **Natalie B. Hogg**, S. Peirone, M. Bruni, and D. Wands. Constraints on the interacting vacuum–geodesic CDM scenario. *Monthly Notices of the Royal Astronomical Society*, 488(3):3423–3438, 2019. [arXiv:1902.10694](#), [doi:10.1093/mnras/stz1915](#).
- [2] **Natalie B. Hogg**, Matteo Martinelli, and Savvas Nesseris. Constraints on the distance duality relation with standard sirens. *Journal of Cosmology and Astroparticle Physics*, 12:019, 2020. [arXiv:2007.14335](#), [doi:10.1088/1475-7516/2020/12/019](#).
- [3] **Natalie B. Hogg**, Marco Bruni, Robert Crittenden, Matteo Martinelli, and Simone Peirone. Latest evidence for a late time vacuum–geodesic CDM interaction. *Physics of the Dark Universe*, 29:100583, 2020. [arXiv:2002.10449](#), [doi:10.1016/j.dark.2020.100583](#).
- [4] Fabrizio Renzi, **Natalie B. Hogg**, and William Giarè. The resilience of the Etherington–Hubble relation. *Monthly Notices of the Royal Astronomical Society*, 513(3):4004–4014, 2022. [arXiv:2112.05701](#), [doi:10.1093/mnras/stac1030](#).
- [5] Matteo Martinelli, Francesca Scarcella, **Natalie B. Hogg**, Bradley J. Kavanagh, Daniele Gaggero, and Pierre Fleury. Dancing in the dark: detecting a population of distant primordial black holes. *Journal of Cosmology and Astroparticle Physics*, 08(08):006, 2022. [arXiv:2205.02639](#), [doi:10.1088/1475-7516/2022/08/006](#).
- [6] Fabrizio Renzi, **Natalie B. Hogg**, Matteo Martinelli, and Savvas Nesseris. Strongly lensed supernovae as a self-sufficient probe of the distance duality relation. *Physics of the Dark Universe*, 32:100824, 2021. [arXiv:2010.04155](#), [doi:10.1016/j.dark.2021.100824](#).
- [7] **Natalie B. Hogg** and Marco Bruni. Shan–Chen interacting vacuum cosmology. *Monthly Notices of the Royal Astronomical Society*, 511(3):4430–4443, 2022. [arXiv:2109.08676](#), [doi:10.1093/mnras/stac324](#).
- [8] **Natalie B. Hogg**, Pierre Fleury, Julien Larena, and Matteo Martinelli. Measuring line-of-sight shear with Einstein rings: a proof of concept. *Monthly Notices of the Royal Astronomical Society*, 520(4):5982–6000, 2023. [arXiv:2210.07210](#), [doi:10.1093/mnras/stad512](#).
- [9] Marco Sebastianutti, **Natalie B. Hogg**, and Marco Bruni. The interacting vacuum and tensions: a comparison of theoretical models. December 2023. [arXiv:2312.14123](#).
- [10] **Natalie B. Hogg**. Constraints on dark energy from TDCOSMO & SLACS lenses. *Monthly Notices of the Royal Astronomical Society: Letters*, January 2024. (in press). [arXiv:2310.11977](#).

White papers: I collected the data for Figure 12 and contributed to the text of the astrostatistics section (in particular section 11.5) of the EuCAPT white paper “**Opportunities and Challenges for Theoretical Astrophysics in the Next Decade**”, Alves Batista et al., 2021. I am a signatory of the Snowmass 2022 white paper “**Cosmology intertwined: A review of the particle physics, astrophysics, and cosmology associated with the cosmological tensions and anomalies**”, Abdalla et al., 2022.

Bibliometrics from **Inspire-HEP**: 240 total citations, mean citation count of 30, h-index of 7, for published papers with fewer than 10 authors.