Neven Caplar

University of Washington
Department of Astronomy
Physics-Astronomy Bldg
Seattle, WA 98195-1700

Phone: +1 609 787 8425
Web: www.ncaplar.com
Email: ncaplar@uw.edu
ORCid: 0000-0003-3287-5250
Google Scholar: KrPhRDoAAAAJ

Full publication list

Peer-reviewed journals

1. 2025, L Palaversa, Z. Ivezic, **N. Caplar**, K. Mrakovcic, B. Abel, O. Razim, F. atkovic, C. Yablonski, T. Saric, T. Jurkic, S. Campos, M. DeLucchi, D. Jones, K. Malanchev, A. Malz, S. McGuire, M. Juric
   PhotoD with LSST: Stellar Photometric Distances Out to the Edge of the Galaxy, AJ, 2025
   doi: 10.3847/1538-3881/ada3c2

2. 2024, K. G. Iyer, J. S. Speagle, **N. Caplar**, J. C. Forbes, E. Gawiser, J. Leja, S. Tacchella
   Stochastic Modelling of Star Formation Histories III. Constraints from Physically-Motivated Gaussian Processes, ApJ, 2024
   doi:10.3847/1538-4357/acff64

3. 2023, C. Burke, Y. Shen, X. Liu, P. Natarajan, **N. Caplar**, J. Bellovary, Z. Wang
   Dwarf AGNs from Variability for the Origins of Seeds (DAVOS): Intermediate-mass black hole demographics from optical synoptic surveys, MNRAS, 2023
   doi: 10.1093/mnras/stac2478

4. 2022, A. B. Kovacevic, V. Radovic, I. Dragana, [and 22 others, including **N. Caplar**]
   The LSST era of supermassive black holes accretion-disk reverberation mapping, APJS, 2022
   doi:10.3847/1538-4365/ac88ce

5. 2021, A. Kovacevic, D. Ilic, L. Popovic, V. Radovic, I. Jankov, I. Yoon, **N. Caplar**, I. Cvorovic-Hajdinjak, S. Smic
   On possible proxies of AGN light-curves cadence selection in future time domain surveys, MNRAS, 2021
   doi.org/10.1093/mnras/stab1595

6. 2020, K. G. Iyer, S. Tacchella, S. Genel, C. C. Hayward, L. Hernquist, A. M. Brooks, **N. Caplar**, R. Dave, B. Diemer, J. C. Forbes, E. Gawsier, R. S. Somerville, T. K. Starkenburg
   The Diversity and Variability of Star Formation Histories in Models of Galaxy Evolution, MNRAS, 2020
   doi.org/10.1093/mnras/staa2150

7. 2020, S. Tacchella, J. C. Forbes **N. Caplar**
   Stochastic modelling of star-formation histories II: star-formation variability from molecular clouds and gas inflow, MNRAS, 2020, 497, 698T
   doi.org/10.1093/mnras/staa1838

8. 2020, I. Delvecchio, E. Daddi, J. Mullaney, E. Bernhard, L. Grimmett, R. Carraro, A. Cimatti, G. Zamorani, **N. Caplar**, D. Elbaz, G. Rodighiero
The evolving AGN duty cycle in galaxies since z $\sim$ 3 as encoded in the X-ray luminosity function, ApJ, 2020, 892, 17D
doi.org/10.3847/1538-4357/ab789c

9. 2020, **N. Caplar**, T. Penna, S. Johnson, J. Greene
Nonstationarity of AGN variability: the only way to go is down!, ApJL, 2020, 889L, 29C
doi.org/10.3847/2041-8213/ab6a11

10. 2019, *(corresponding author)* L. Sartori, K. Schawinski, B. Trakhtenbrot, **N. Caplar**, E. Treister, C. Zhang
A forward modelling approach to AGN variability – method description and early applications, ApJ, 2019, 883, 139S
doi.org/10.3847/1538-4357/ab3c55

11. 2019, **N. Caplar**, S. Tacchella
Stochastic modeling of star-formation histories I: the scatter of the star-forming main sequence, 2019, MNRAS, 487, 3845C
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12. 2018, L. Sartori, K. Schawinski, B. Trakhtenbrot, **N. Caplar**, E. Treister, M. Koss, M. Urry, C. Zhang
A model for AGN variability on multiple time-scales, 2018, MNRAS, 476L, 34S
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13. 2018, **N. Caplar**, S. Lilly, B. Trakhtenbrot
AGN evolution from galaxy evolution viewpoint - II, ApJ, 2018, 867, 148C
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14. 2017, **N. Caplar**, S. J. Lilly, B. Trakhtenbrot
Optical variability of AGN in the PTF/iPTF survey, ApJ, 2017, 834, 111C
doi.org/10.3847/1538-4357/aae691

15. 2017, A. Weigel, K. Schawinski, **N. Caplar**, A. Carpineti, R. Hart, S. Kaviraj, W. Keel, S. Kruk, C. Lintott, R. Nichol, B. Simmons, R. Smethurst
Galaxy Zoo: Major galaxy mergers are not a significant quenching pathway, APJ, 2017, 845, 145W
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16. 2017, A. Weigel, K. Schawinski, **N. Caplar**, O. I. Wong, T. Ezequiel, B. Trakhtenbrot
AGN and their host galaxies in the local Universe: Two mass-independent Eddington ratio distribution functions characterize black hole growth, ApJ, 2017, 845, 134W
doi.org/10.3847/1538-4357/aa803b

17. 2016, **N. Caplar**, S. Tacchella, S. Birrer
Quantitative evaluation of gender bias in astronomy, 2017, NatAs, 1E, 182C
doi.org/10.1038/s41550-017-0141

18. 2015, **N. Caplar**, S. J. Lilly, B. Trakhtenbrot

AGN evolution from a galaxy evolution viewpoint, ApJ, 2015, 811, 148C
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19. 2013, **N. Caplar**, H. Stefancic
Generalized models of unification of dark matter and dark energy, Phys. Rev. D, 2013, 87, 023510
doi.org/110.1103/PhysRevD.87.023510

Conference proceedings

1. 2024, **N. Caplar**, W. Beebe, D. Branton, S. Campos, A. Connolly, M. DeLucchi, D. Jones, M. Juric, J. Kubica, K. Malanchev, R. Mandelbaum, S. McGuire
Using LSDB to enable large-scale catalog distribution, cross-matching, and analytics
Proceedings of XXXIV Astronomical Data Analysis Software & Systems (ADASS) conference, November 10-14 2024, Valletta, Malta; 10.48550/arXiv.2501.02103
2. 2022, **N. Caplar**, R. Lupton, J. E. Gunn, H. Siddiqui, P. Price, C. Loomis, A. L. Fur, J. E. Meyers
Prime focus spectrograph (PFS) for the Subaru Telescope: 2D modeling of the point spread function
Proc. SPIE 12184, Ground-based and Airborne Instrumentation for Astronomy IX, 1218470 (29 August 2022); doi.org/10.1117/12.2629364
3. 2022, Shian-Yu Wang, Masahiko Kimura, Chi-Huang Yan , [and 29 others, including **N. Caplar**]
Prime focus spectrograph (PFS) for the Subaru Telescope: the prime focus instrument
Proc. SPIE 12184, Ground-based and Airborne Instrumentation for Astronomy IX, 121846R (29 August 2022); doi.org/10.1117/12.2629098
4. 2022, K. Breivik, A. J. Connolly, K. E. S Ford, [and 94 others, including **N. Caplar**]
From Data to Software to Science with the Rubin Observatory LSST
https://arxiv.org/abs/2208.02781
5. 2018, T. Naoyuki , T. Naruhisa, A. Shimono, [and 111 others, including **N. Caplar**]
Prime Focus Spectrograph (PFS) for the Subaru telescope: ongoing integration and future plans, Proceedings of the SPIE, Volume 10702, id. 107021C 12 pp.
6. 2013, **N. Caplar**, M. Suznjevic, M. Matijasevic
Analysis of players' in-game performance vs rating: Case study of Heroes of Newerth, Foundation of Digital games 2013, pp. 237-244