

Neven Caplar

Princeton University
Astrophysical Department
08540 - Princeton, NJ, USA
4 Ivy Lane

Phone: +1 609 787 8425
Web: www.ncaplar.com
Email: ncaplar@princeton.edu
Email2: caplarn@phys.ethz.ch

Work experience

2017 - , Associate Professional Specialist, Princeton University

Education

2013 - 2017, Ph.D., ETH Zurich

Advisor: Dr. Simon J. Lilly, ETH Zurich

2005 - 2010, MSc, University of Zagreb

Advisor: Dr. Hrvoje Stefancic, Institut Ruder Boskovic

Research

Main topics of my work include black hole-galaxy co-evolution, AGN physics and time domain astronomy.

Peer-Reviewed Journal Articles in Astronomy

1. 2018, **N. Caplar**, S. Tacchella
Stochastic modeling of star-formation histories I: the scatter of the star-forming main sequence, submitted to MNRAS
2. 2018, **N. Caplar**, S. Lilly, B. Trakhtenbrot
AGN evolution from galaxy evolution viewpoint - II, ApJ, 2018, 867, 148C
3. 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
4. 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
5. 2017, A. Weigel, K. Schawinski, **N. Caplar**, O. I. Wong, T. Ezequiel, B. Trakhtenbrot
Two mass independent Eddington ratio distribution functions regulate black hole growth of blue and red galaxies in the local Universe, ApJ, 2017, 845, 134W
6. 2017, **N. Caplar**, S. J. Lilly, B. Trakhtenbrot
Optical variability of AGN in the PTF/iPTF survey, ApJ, 2017, 834, 111C
7. 2015, **N. Caplar**, S. J. Lilly, B. Trakhtenbrot
AGN evolution from a galaxy evolution viewpoint, ApJ, 2015, 811, 148C
8. 2013, **N. Caplar**, H. Stefancic
Generalized models of unification of dark matter and dark energy, Phys. Rev. D, 2013, 87, 023510

Other Publications

These publications are not directly connected to Astronomy. However, they are both “big-data” papers for which I collected and reduced the data.

9. 2016, **N. Caplar**, S. Tacchella, S. Birrer
Quantitative evaluation of gender bias in astronomy, 2017, NatAs, 1E, 182C
10. 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

Telescope Proposals

2013, F. Miniati, S. J. Lilly, **N. Caplar**

The connection between magnetised galactic outflows and high Faraday effect in the circumgalactic environment of intermediate redshift galaxies; Awarded 24 hours with VIMOS instrument on VLT

2013, S. J. Lilly, F. Miniati, **N. Caplar**, B. Gaensler, J. Farnes

Testing the association of magnetized plasma with high redshift galaxies along the line of sight; Awarded 5 nights at NTT telescope

Seminar and Conference Presentations

2018: New Directions in Optical/Near-IR Spectrographs and Wide-field Imagers, Princeton, USA (conference, talk)

2017: Weizmann Institute of Science/ University of Geneva/ Unveiling the Physics Behind Extreme AGN Variability, St. Thomas, USA (conference, talk)/ Models of Gravity workshop, Hannover, Germany (workshop, talk)

2016: Caltech/ University of Washington/ Stanford/ University of Maryland/ Shining from the heart of darkness: black hole accretion and jets, Katmandu, Nepal (conference, talk)/ AGN: what’s in a name, Munich, Germany (conference, talk)

2015: Black Hole Accretion and AGN Feedback, Shanghai, PRC (conference, talk)/ Inaugural Zwicky Symposium, Braunwald, Switzerland (conference, talk-organizer)/ Demographics and environment of AGN from multi-wavelength surveys Chania, Greece (conference, talk)/ Unveiling the AGN-Galaxy Evolution, Puerto Varas, Chile (conference, talk)

2014: COSMOS team meeting, Zagreb, Croatia (workshop, talk)/ Multiwavelength-surveys, Dubrovnik, Croatia (conference, poster)/ Powerful AGN, Port Douglas, Australia (conference, talk)/ The Formation and Growth of Galaxies in the Young Universe, Obergurgl, Austria (conference, talk)

2012: Karl-Franzens University/ Jagellonian University/ European Summer Campus, Strasbourg, France (conference-school, poster)

Other relevant information

Reviewer for MNRAS and ApJ

Programming Languages: Mathematica, Python, L^AT_EX, CIAO, Zemax

Experience in working with X-ray, optical and time-domain data

Experience in data reduction, survey calibration, “big data” and machine learning techniques

Since April 2015 I run astrodataiscool.com website, where I publish analysis of the data from astronomical and popular sources. The website gathered ~20000 unique views.