Arun Kannawadi

CONTACT	Department of Astrophysical Sciences,	Website: arunkannawadi.github.io
	Princeton University, 4 Ivy Lane,	$\operatorname{Email}(s)$: arunkannawadi@princeton.edu
	Princeton, NJ 08544, USA	kannawadi.arun@gmail.com

RESEARCH	Weak gravitational lensing (WL), Galaxy clusters, Mass mapping,
INTERESTS	Large-scale structure of the Universe, Cosmology with Big Data

CAREER	Postdoctoral Research Associate	October 2019 - present
DOCUMENTONIC	D. A. II D. A. NILIGA	

POSITIONS Princeton University, Princeton NJ, USA.

> Postdoctoral Researcher September 2016 - September 2019

Leiden Observatory, Leiden, The Netherlands

MITACS Globalink Research Assistant May 2010 - August 2010

University of Toronto, Toronto, Canada.

Summer intern, working on μ CLinux May 2009 - August 2009

Sands India Pvt. Ltd., Chennai, India

EDUCATION Doctorate of Philosophy May 2013 - August 2016

McWilliams Center for Cosmology

Department of Physics, Carnegie Mellon University

Master of Science, Physics August 2011 - May 2013

Department of Physics, Carnegie Mellon University (CMU)

Bachelor of Technology, Electrical Engineering & Physics August 2007 - June 2011

Indian Institute of Technology, Madras (IITM) Chennai, India

PUBLICATIONS As of September 3, 2021, I have 35 referred journal papers and 6 pre-prints on arXiv/astro-ph, several

of which are accepted for publication. I have a total of 1159 citations according to SAO/NASA ADS, with an h-index of 15, i.e., 15 papers with 15 or more citations.

GRANTS,	LSSTC Enabling Science Award (US\$4k)	June 2021-2022
AWARDS &	Pipeline Scientist, LSST Dark Energy Science Collaboration (US\$149k)	October 2020-2023
FELLOWSHIPS	Co-I for Cycle 28 HST proposal (HST-AR-16138; US\$20k)	2020-2022

"Constraining the masses of galaxy overdensities at z > 1in CANDELS and COSMOS through weak lensing in the NIR"

Several travel supports from LSST DESC 2015 Travel funding from Graduate Student Assembly to attend 224th AAS meeting (US\$1K) 2014 The Arnys Clinton Lilly Jr. Fellowship (Graduate fellowship) 2012 The Dr. Thane Smith Fellowship (Graduate fellowship) 2012 MITACS Scholarship (CA\$8.5k) 2010 Travel grant from Office of Alumni Affairs, IITM (15K INR) 2010 Scholarship from T.I.M.E covering 4 year tuition at IITM (> 104K INR) 2007-2011

Python, C, C++, Matlab/Octave, Git, LATFX SOFTWARE

DEVELOPMENT Co-developed GalSim¹, an open source package for realistic galaxy image simulations.

Stack developer, Rubin Observatory Data Management

¹ https://github.com/GalSim-developers/GalSim

TEACHING & MENTORSHIP	Invited lecturer - Special undergraduate course on Gravitational Lens University of Antioquia, Medellin, Colombia (Developed 20 hours worth of lecture and lab exercises)	\log^2 Summer 2017
	Research supervisor for a Masters student at Leiden Observatory	October 2018 - July 2019
	LEAPS ³ research advisor for undergraduate students	Summer 2017 & 2018
	TA - Summer Academy of Mathematics and Science (SAMS)	Summer-2 2012
	TA - Physics-II for Engineers (33-107)	Summer-1 2012
	TA - Matter and Interactions-II (33-132)	Spring 2012
	TA - Physics-II for Science students (33-112)	Fall 2011, 2012
SELECTED	Thursh Dont of Astronhygical Coinness Dringston University Drings	eton December 2020
TALKS	Thunch, Dept. of Astrophysical Sciences, Princeton University, Princeton Plenary talk at the Euclid Consortium meeting, Helsinki, Finland	June 2019
IALKS	(c.) Cosmology on Safari, KwaZulu-Natal, South Africa	March 2019
	Stony Brook/Brookhaven National laboratory joint cosmology semina	
		January 2019 January 2019
	HSC meeting, Princeton University, Princeton Seminar, Raman Research Institute, Bangalore	December 2017
		December 2017 December 2017
	Seminar, Indian Institute of Astrophysics, Bangalore Seminar(s), Indian Institute of Technology, Madras	Dec 2017, Jan 2015
	Dark Energy in the Laboratory, Lorentz Center, Leiden	November 2017
	(c.) 228 th meeting, American Astronomical Society (AAS), San Diego	
	* Invited talks, unless denoted by (c.)	June 2010
PROFESSIONAL	Editorial board member, Galaxies (ISSN 2075-4434)	August 2020 - August 2021
ACTIVITIES &	Reviewer for MNRAS, Galaxies, Universe, Symmetry,	
OUTREACH	Applied Sciences and Frontiers in Physics	
	(31 reviews for 16 manuscripts)	July 2015 - present
	Writer for Princeton Insights accessible reviews	July 2020 - present
	Organising team, Astronomy on Tap, Leiden	March 2017 - March 2019
	Public talk, Planetarium of Medellin, Colombia	July 2017
	Public talk, Allegheny Observatory, Pittsburgh	July 2016
	Poster Judge for 228th AAS meeting	June 2016
	Poster Judge for Meeting of the Minds, CMU	May 2016
	Coordinator for Science outreach, National Service Scheme, IITM	Aug 2008 - July 2009
LEADERSHIP	PSF Working group convener, LSST DESC	June 2021 - present
ROLES	Convener of job opportunities outside academia for Astro graduates	June 2020 - present
	Co-Lead, Shape measurement work package, Euclid Consortium	September 2017 - present
	President of Indian Graduate Student Association, CMU	2014
	(nominated for Outstanding Student Organization Leader in 2014;	
	previously served as Vice-President and Treasurer	
	Coordinator - Shaastra Circuit Design Challenge, IITM	January 2010 - October 2010
	Project Lead, Fertiliser feeder, Spirit of Engineering, IITM	May 2008 - October 2008
MEMBERSHIPS	Active member of Euclid Consortium Diversity Committee	June 2018 - present
	Junior member, International Astronomical Union (IAU)	October 2018 - present
	Infrastructure contributor to Kilo-Degree Survey (KiDS)	2016 - present
	Member of the WFIRST Detector requirements team	2014-2016
	Member of LSST Dark Energy Science Collaboration	2013- 2016 & 2019 - present
	Member of Euclid Consortium	2013 - present
	2 https://sites.google.com/site/astrotwincolo/meetings/2017-5th-meeting 3 http://leaps.strw.leidenuniv.nl/	

MENTS	All India Engineering Entrance Examination (AIEEE) All India Rank of 4 in Vellore Institute of Technology Entrance Examination First in the district of Chennai on 10^{th} grade board examinations	2007 2007 2005
POSTERS PRESENTED	Workshop on Weak gravitational lensing, Berkeley Workshop on Foreground physical effects on LSST WL Science Innovation with Impact, CMU 224 th meeting, American Astronomical Society (AAS), Boston	January 2019 December 2015 April 2015 June 2014
WORKSHOPS PARTICIPATED	Rubin Observatory algorithms workshop (virtual) Euclid Consortium meeting, Bonn, Germany Statistical challenges for LSS in the era of LSST, Oxford, England Euclid Consortium meeting, London, England The Bright & Dark Universe, Naples, Italy LSST Dark Energy Science Collaboration meeting, Sacramento, USA Wide Field Infra-Red Survey meeting, Pasadena, USA Santa Fe Cosmology Workshops, 2013 & 2014 Summer school on Astrostatistics, Pennsylvania State University (PSU), USA	March 2020 June 2018 April 2018 June 2017 January 2017 March 2015 November 2014 July 2013, 2014 May 2013

All India Rank of 206 (top 0.1 percentile) in IIT-Joint Entrance Examination (JEE)

All India Rank of 618 and Tamilnadu State Rank of 12 in

REFERENCES

SCHOLARLY ACHIEVE-

Prof. Dr. Henk Hoekstra

Leiden Observatory, 2333 CA Leiden, The Netherlands

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Tel: +31 (0)71 5275594

Prof. Rachel Mandelbaum

McWilliams Center for Cosmology, Department of Physics, Carnegie Mellon University, Pittsburgh, PA 15213 Email: rmandelb[at]andrew.cmu.edu

 $Tel: +1 \ 412 \ 268 \ 1714$

Prof. Suresh Govindarajan

Department of Physics, Indian Institute of Technology Madras, Chennai, India 600036 Email: suresh[at]physics.iitm.ac.in

Tel: +91-44-22574867

Prof. Lance Miller

Dept. of Physics, Oxford University, Denys Wilkinson Building, Keble Road, Oxford, OX1 3RH Email: lance.miller[at]physics.ox.ac.uk 2007

Tel: 01865 (2)73342

Prof. Catherine Heymans

The Institute for Astronomy, University of Edinburgh, Royal Observatory, Blackford Hill, Edinburgh, EH9 3HJ, UK. Email: heymans[at]roe.ac.uk

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