

Publications

234 publications, 14 as first/corresponding author, over 9,200 citations, h-index 46 (September 2019)
See <http://web.stanford.edu/~dgruen> for a list

Talks

Gave more than 100 talks at conferences / collaboration meetings / seminars / colloquia / outreach events

Selected Conference Talks

<i>APS April</i> , invited, Cosmology from DES	Denver, CO	04/2019
<i>Cosmology and Structure formation</i> , invited	Seoul, South Korea	11/2018
<i>SUGAR-RUSH</i> , invited, DES overview	Shanghai, China	06/2018
<i>Rencontres de Blois</i> , invited, DES overview	Blois, France	06/2018
<i>Dark Universe</i> , invited, DES WL overview	Garching, Germany	10/2017
<i>APS DPF</i> , invited announcement of DES Y1 results	Fermilab, IL, video: goo.gl/n8w7Ua	08/2017
<i>DESI collaboration meeting</i> , invited, DES review	Berkeley, CA	06/2017
<i>GravLens2016</i> , Weak lensing by galaxy troughs	Leiden, Netherlands	07/2016
<i>PACCD</i> , invited, brighter/fatter effect in DECam	Brookhaven, NY	12/2014
<i>MIAPP workshop</i> , invited, WL by SZ clusters	Garching, Germany	09/2014

Selected Invited Seminars/Colloquia

Spitzer Memorial Lecture on cosmology	CSU East Bay, CA	11/2018
Colloquium on accurate redshifts for cosmology	AURA / Gemini, Chile	10/2018
Cosmology Seminar on weak lensing	Caltech, CA	08/2018
Astronomy Seminar on DES weak lensing	UC Riverside, CA	05/2018
Physics Colloquium on weak lensing cosmology	UHawaii Manoa, HI	11/2017
Astrophysics Colloquium on weak lensing cosmology	UMelbourne, Australia	11/2017
EPFL / CERN / UGeneva meeting on DES WL	UGeneva, Switzerland	11/2017
Astrophysics Seminar on DES WL	UTurin, Italy	10/2017
Joint Astrophysics Colloquium on DES weak lensing	ESO Garching, Germany	10/2017
Special Seminar on DES weak lensing	CEA Saclay, France	10/2017
LineA Webinar on weak lensing for cosmology	Rio de Janeiro, remotely	10/2017
HEP Special Seminar on DES cosmology constraints	SLAC, CA	08/2017
Panelist on clusters of galaxies in WFIRST / LSST	Caltech, CA	09/2016
LBNL INPA Seminar on DES weak lensing	Berkeley, CA	02/2016
ITC Lunch Seminar on galaxy troughs	Harvard, MA	01/2016
Cosmology Seminar on galaxy troughs	MPA Garching, Germany	11/2015
UCL Cake Seminar on galaxy troughs	London, UK	06/2015
KIPAC Tea Talk on covariance of cluster WL	Stanford, CA	05/2015
Cosmology Seminar on cluster weak lensing	MPA Garching, Germany	01/2014
Cosmology Seminar on optimal cluster weak lensing	Alfa Bonn, Germany	08/2012
Seminar on shape estimates with neural networks	UPenn, PA	09/2009

Grants and Awards

- Successful grant proposals as main author (>2.1M\$) and co-author (>13M\$)
- PI / Co-I of successful proposals for >100 orbits of HST and >700h of ground-based telescope time
- Dark Energy Survey builder status (for 2 FTE years of infrastructure work)
- [University Research Association](#) (Fermilab) Graduate Thesis Award 2016
- LMU PhD Thesis Award (Preis der Universitätsgesellschaft) 2016
- Student scholarships by German National Merit Foundation (Studienstiftung), Max Weber-Program of the State of Bavaria, Bayerische EliteAkademie (B.Sc. and M.Sc. studies), DAAD (Master's thesis)

Professional Service

- Co-coordinator of the [Dark Energy Survey](#) weak lensing working group (>100 members, since 08/2016)
- Early Career Scientist liaison and External Collaborations liaison to DES Science Committee
- (Co-)organizer of 4 seminar series, including cosmology seminar and astrophysics colloquium at Stanford
- Main organizer of 4 [lighthouse](#) workshops at Stanford, funded by KIPAC, DES, and LSSTC
- >25 nights of telescope observing at CTIO and Wendelstein observatory
- Reviewer for A&A, ApJ, JCAP, JInst, MNRAS, Nature, PASJ, Physics Letters, Elsevier Books; NASA ESSF, HST TAC; DES and LSST-DESC internal reviewer

Teaching and Mentoring Experience

Supervised and co-supervised 13 researchers at the undergraduate to post-doctoral level,

- Jamie McCullough, PhD student at Stanford, photo- z , 2019 – ongoing,
- Alexandra Amon, post-doctoral fellow at Stanford, weak lensing, 2018 – ongoing,
- Alessa Ibrahim, [CAMPARE](#) intern at Stanford, density split statistics, 2018,
- Tiffany Tang, [RISE](#) intern at Stanford, density split statistics, 2018,
- Romain Buchs, M.Sc. student at Stanford visiting from EPF Lausanne, photo- z , 2018,
- Justin Myles, PhD student at Stanford, photo- z and cluster cosmology, 2018 – ongoing,
- Donny Flynn, undergraduate intern at Stanford, cluster lensing, 2017,
- Romy Rehmann, M.Sc. and PhD theses at LMU, cluster lensing, 2015 – ongoing,
- Tamas Varga, M.Sc. and PhD theses at LMU, cluster lensing, 2015 – ongoing,
- Dmitry Grebenyuk, M.Sc. thesis at LMU, LSS, 2015/2016, now research assistant at TU Munich,
- Oliver Friedrich, M.Sc. and PhD thesis at LMU, cosmology with structure, 2014 – 2018,
- Dr. Ralf Kosyra, PhD thesis at LMU, cluster cosmology, 2014 – 2016, now engineer in the industry,
- Yi-Hao Chen, M.Sc. thesis at LMU, shape measurement, 2012/2013, now PhD student at U Wisconsin.

Taught 17 courses on

- Cosmology (guest lecturer Stanford 2017),
- Introductory astrophysics (tutorials at LMU 2013 – 2014; guest lecturer Stanford 2016 – 2018),
- Large-scale structure (tutorials at LMU 2015),
- Astrophysics labs (LMU, 2013 – 2015),
- Physics labs for students of medicine (LMU, 2008).

Outreach

- Guide at [Point Bonita lighthouse](#), teaching 800 visitors about optics once a month, since 01/2018
- Outreach speaker at [Schloss Ringberg open day](#), 2015 and [Astronomy on Tap](#), San Francisco, 2017
- Commencement speaker at LMU Physics graduation ceremony, 2012 (M.Sc.) and 2015 (PhD)
- Winner of Munich [Science Slam](#), Oct 2013
- Winner of LMU Philosophy Essay Competition 2009, *Can scientific theories depict reality?*