

Curriculum Vitae
ALEXIE LEAUTHAUD

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RESEARCH INTERESTS

- Weak gravitational lensing as a probe of dark matter, dark energy, and modified gravity.
- Galaxy-galaxy lensing to probe the galaxy-dark matter connection and as a cosmological tool.
- Galaxy formation, large-scale structure, groups and clusters of galaxies.
- Team collaborations: COSMOS, Baryon Oscillation Spectroscopic Survey (BOSS), The CFHT Survey of Stripe 82 (CS82), VICS82 (IR) Survey of Stripe 82, Hyper-Suprime Cam Survey (HSC), Dark Energy Science Collaboration (DESC), WFIRST Science Investigation Team.

EDUCATION AND SCHOLARSHIPS

- 2011-2013 Kavli-IPMU distinguished (5yr position) post-doctoral fellowship, U.Tokyo
2008-2011 Chamberlain Fellow (5yr position), the Lawrence Berkeley National Laboratory (LBNL)
2004-2008 Ph.D in Astrophysics with honors - LAM - France. Advisers: Jean-Paul Kneib and Olivier Le Fevre. Ph.D title: *Properties of dark matter halos determined by galaxy-galaxy lensing in the COSMOS survey*
2004 National scholarship for graduate studies (French equivalent of the NSF)
2003-2004 Master in Astrophysics with honors - Institut d'Astrophysique de Paris - Paris VI
1999-2003 Double major in Aeronautical and Space Engineering (ENSICA, France) and in Wireless Systems (Kungl Tekniska Hogskolan, KTH, Sweden) with honors in both programs
2001 Awarded competitive ENSICA fellowship to pursue a double Masters degree.
1997-1999 B.A Mathematics and Physics - with awards in Mathematics - Camille Guerin - France

EMPLOYMENT DETAILS

- 2016-date Assistant professor, University of California Santa Cruz, Astronomy Department & Santa Cruz Institute for Particle Physics (SCIPP)
2013 & 2015 Maternity leave
2013-2016 Researcher, Kavli-IPMU, U.Tokyo
2011-2013 Kavli-IPMU fellow, U.Tokyo
2008-2011 Chamberlain fellow, The Lawrence Berkeley National Laboratory (LBNL)
2004-2006 Lecturer in Mathematics and TA at the University of Marseille Provence - France
2004 Undergraduate summer research at Caltech - Pasadena -USA

STUDENTS AND MENTORING

- Current Song Huang (postdoc), Ryoma Murata (graduate student), Eric Gentry (graduate student)
Past Josh Speagle (undergraduate), now a graduate student at Harvard
Shun Saito (post-doc), 3 publications, now a post-doc fellow at the Max Planck Institute
Claire Lacker (post-doc), now a data scientist
Hanako Hoshino (undergraduate), 1 publication, now working for NHK
Masato Kobayashi (undergraduate), 1 publication, now a graduate student at U.Nagoya
Jin Soo Lim (undergraduate), now a data scientist
Matt George (Berkeley graduate student), 3 publications, now a data scientist
Charlotte Welker (ENS Paris undergraduate), 1 publication, now a post-doc at UWA
Melody Wolk (ENS Paris undergraduate), now a post-doc at IfA

COMPETITIVELY OBTAINED FUNDING AND TELESCOPE TIME

2015	P.I, European Research Council Starter Grant (declined for UCSC position) (2 million)
2014	Co.I, <i>A Multidisciplinary approach for HSC analysis</i> , Japan Science and Technology Agency (~3 million)
2014	P.I, <i>Weak Lensing with HSC</i> , JSPS grant (~50k)
2014	P.I, <i>MaNGA observations of BCGs</i> , Sloan-IV ancillary proposal (50 IFU spectra)
2007-2010	Co.P.I, <i>Decoding Dark Energy with Weak Gravitational Lensing</i> , LBNL Laboratory Directed Research and Development grant (~500k)
2010	P.I, <i>The Brightest Cluster Galaxies in Stripe 82</i> , Sloan-III ancillary proposal (2000 spectra)
2010	Co-P.I, <i>CFHT/Megacam High-Resolution Imaging of the SDSS Stripe 82: Measuring the Mass Distribution of Structures from Clusters to Galaxy Scales</i> , CFHT, 70h
2010-2011	Co.I, <i>NIR (J and K) imaging on Stripe 82</i> , CFHT and VISTA, ~100h
2010	Co.I, <i>The Dark Matter - AGN Connection and Weak Lensing</i> , Chandra archive proposal
2009	Co.I, <i>Probing the merging history of group halos and galaxies in groups since $z \sim 1$</i> , VLT, 4 nights
2009	Co.I, <i>Deep NIR spectroscopy of record-breaking cluster candidates at $z=1.8$</i> , Subaru, 3 nights
2005	Co.I, <i>Studying strong gravitational lenses in COSMOS</i> , VLT, 2 nights

SELECTED RECENT COLLOQUIA AND INVITED CONFERENCE TALKS

ITC luncheon, CfA Harvard, 2017

Stanford, Colloquium, 2017

Berkeley, Colloquium, 2016

Keynote Speaker, Statistical Challenges in 21st Century Cosmology, Chania, 2016

Munich Joint Astronomy Colloquium, Max Planck Institute for Astrophysics, 2016

Carnegie Mellon, Colloquium, 2016

Caltech, Colloquium, 2016

Jet Propulsion Laboratory, Colloquium, 2016

Invited Speaker, Theoretical and Observational Progress on Large-Scale Structure of the Universe, MPA, 2015

Invited Speaker, Life Cycle of Galaxies in their Favorite Environments, Excellence Cluster, 2015

Centre d'Energie Atomique, Saclay, Colloquium, 2015

Johns Hopkins, Colloquium, 2015

Aspen Center for Physics, Colloquium, 2014

Princeton, Colloquium, 2014

Invited Speaker, Galaxy Masses as Constraints of Formation Models/IAU, Oxford, 2014

Institut d'Astrophysique de Paris (IAP), Colloquium, 2014

Invited Speaker, Multi-wavelength Heritage of Stripe 82, Princeton, 2014

2013: maternity leave and limited travel

U.Tokyo, Astronomy Dept. Colloquium, 2012

ROE Edinburgh Colloquium, 2012

ICG Portsmouth Colloquium, 2012

Invited Speaker, STScI symposium on dark matter, 2011

CONFERENCE/WORKSHOP ORGANIZATION AND COMMUNITY SERVICES

- Chair of HSC survey Galaxy Formation Working Group
- Co-organizer, KITP 3 month workshop, 2017, *The Galaxy-Halo Connection Across Cosmic Time*
- Co-organizer, KITP conference, 2017, *Quantifying and Understanding the Galaxy-Halo Connection*
- Scientific Organizing Committee Co-Chair, 2016, *Celebrating a Century of Gravitational Lensing*
- Co-organizer for workshop at Kavli-IPMU, 2015, *Getting a Grip on Galactic Girths*
- SOC member, 2014, *Multi-wavelength Heritage of Stripe 82*, Princeton workshop
- Aspen summer workshop organizer, 2013, *The Next Decade of Weak Lensing Science*
- Co-organizer of workshop at Kavli-IPMU, 2013, *Cosmological information from small scales II*
- SOC member, SnowPAC 2012, *Gravitational Lensing in the age of Survey Science*
- Co-organizer of workshop at SLAC, 2012, *Cosmological information from small scales*
- Reviewer: European Research Council (ERC) - Astrophysical Journal (ApJ) - Monthly Notices (MNRAS) - Subaru Open Use Proposals

FELLOWSHIPS AND AWARDS

- Kavli-IPMU distinguished (5yr position) prize post-doctoral fellowship, U.Tokyo
- Chamberlain prize fellowship (5yr position), the Lawrence Berkeley National Laboratory (LBNL)
- CITA postdoctoral fellowship (declined) and DUEL postdoctoral fellowship (declined)
- Fellowship for graduate studies (French equivalent of the NSF)
- ENSICA Achievement Award for double Masters degree.

SCIENCE COMMUNICATION AND PUBLIC OUTREACH

Aspen center for Physics, public lecture, 2014.

Kavli-IPMU, host and lectures to female high-school students with interests in science.

Public lecture, *Dark energy: finding your way in the dark*, Lawrence Hall of Science, 2010

Science at the theater, *What science tells us about the hidden universe*, Berkeley Repertory, 2009

Public lecture, *What is gravitational lensing?*, LBNL Summer Lecture Series, 2009

Public lecture, *Gravitational Lensing and Cosmology*, East Bay Astronomical Society, 2009

REFERENCES

Dr. Jean-Paul Kneib	Dr. James E. Gunn	Dr. Martin White
EPFL SB IPEP LASTRO	Peyton Hall	Astronomy Department
Observatoire	4 Ivy Lane	501 Campbell Hall
Sauverny	Princeton	University of California Berkeley
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