

JOAQUIN D. VIEIRA

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SCIENTIFIC INTERESTS

Observational cosmology, sub/mm instrumentation, cosmic microwave background, cosmic star formation history, cosmic acceleration, mm spectroscopy, gravitational lensing, cosmic neutrinos, epoch of reionization, dark matter, cosmic dust, early life.

EDUCATION

2009 Ph.D. Physics, The University of Chicago
Thesis: Extragalactic Millimeter-Wave Sources in the South Pole Telescope Survey Data
Advisor: John Carlstrom
2005 M.S. Physics, The University of Chicago
2002 B.S. Astrophysics, The University of California, Los Angeles

PROFESSIONAL HISTORY

Sept. 2013 – *current*
Assistant Professor, Department of Astronomy, **University of Illinois at Urbana-Champaign**
Sept. 2009 – Aug. 2013
Postdoctoral Researcher, **Caltech**
Sept. 2002 – Sept. 2009
Graduate Research Assistant, **University of Chicago, Kavli Institute for Cosmological Physics**

AWARDS

2015 National Center for Supercomputing Applications (NCSA) Fellow
2015 Beckman Fellow, Center for Advanced Study, University of Illinois
2011 Antarctic Service Medal of the United States of America
1996 President's Award for Educational Excellence

SELECTED GRANTS AND PROPOSALS AS PI

Department of Energy: *Cosmic Frontier Experiment* 2016
ALMA Cycle 3: *Resolving water emission in the early universe*
Chandra Cycle 16: *The Most Concentrated Infrared Luminosity Density in the Universe*
HST Cycle 21: *High-Redshift Starburst Galaxies Under the Cosmic Microscope*
Spitzer Cycle 10: *High-Redshift Starburst Galaxies Under the Cosmic Microscope*
Spitzer Cycle 8: *Measuring the Stellar Mass of a $z=6.3$ Submillimeter Galaxy*
Herschel OT2: *Revealing the most luminous dusty star forming galaxies*
HST Cycle 19: *Strongly Lensed Dusty Star Forming Galaxies*
NSF AAG 2013: *Exploring Galaxy Evolution and Missing Satellites with ALMA and Gravitational Lensing*
Spitzer Cycle 8: *Strongly Lensed Dusty Star Forming Galaxies*
Herschel OT1: *Revealing the most luminous dusty star forming galaxies*
Spitzer Cycle 6: *High-Redshift Sub-Millimeter Galaxies*

INSTRUMENTATION AND COLLABORATIONS

- South Pole Telescope (SPT) 2005–*current*
- Herschel/SPIRE Extragalactic GT Team (HerMES) team member 2009–*current*
- Dark Energy Survey (DES) 2014–*current*
- Large Synoptic Survey Telescope (LSST) 2015–*current*
- Cornell Caltech Atacama Telescope (CCAT) science team 2010–2014
- Chajnantor Sub/millimeter Survey Telescope (CSST) science team 2013–*current*
- Z-Spec mm spectrometer 2010–2013, APEX, Atacama, Chile
- CERN Axion Solar Telescope (CAST) 2002–2006

TEACHING EXPERIENCE

Spring 2014 Astronomy 100: Perspectives in Astronomy
Spring 2015 Astronomy 503: Observational Astronomy
Spring 2016 Astronomy 414: Astronomical Techniques
Fall 2016 Astronomy 503: Observational Astronomy
Currently advising two graduate students: Andrew Nadolski, Sreevani Jarugula

PROFESSIONAL SERVICE

- NASA FIR Surveyor Science and Technology Definition Team (2016—)
- *Spitzer* Cycle 12 TAC member (2015)
- Panel member and chair for NASA APRA and SAT (2014/15)
- TAC member, Caltech Optical Observatories 2012B,
- TAC member, CARMA 2013A
- SOC for “Through the Infrared Looking Glass: A dusty view of galaxy and AGN evolution” October 2011, Pasadena, CA
- Referee, *Nature*, *ApJ*, *MNRAS*, *A&A*
- Member AAS, APS
- Illinois Department of Physics (2013) and Astronomy (2014,2016) faculty search committee
- Illinois Department of Astronomy graduate admissions committee (2014—*current*)

PUBLIC OUTREACH

- Initiated and organized *Astronomy on Tap* in Urbana 2016—*current*
- Allerton Family Campout & Exploration hands-on astronomy demonstrations 2015—*current*
- Booker T. Washington STEM Academy Astronomy in Schools lectures 2015—*current*
- Osher Lifelong Learning Institute (OLLI) lectures 2015—*current*
- University of Illinois Saturday Morning Physics for Everyone lecture 2015
- Kavli Foundation Spotlight Roundtable Live Webcast and Q&A 2013
- Composed music for the movie for the public accompanying the 2004 data release Sloan Digital Sky Survey (SDSS) <http://astro.uchicago.edu/cosmos/projects/sloanmovie/>

REFERENCES

Prof. Jamie Bock, California Institute of Technology, USA, jjb@astro.caltech.edu
Prof. John Carlstrom, University of Chicago, USA, jc@kicp.uchicago.edu
Prof. Sunil Golwala, California Institute of Technology, USA, golwala@caltech.edu
Prof. Gil Holder, University of Illinois at Urbana-Champaign, USA, gholder@illinois.edu
Prof. William Holzzapfel, University of California, Berkeley, USA, swlh@cosmology.berkeley.edu
Prof. Rob Ivison, European Southern Observatory, Germany, rji@roe.ac.uk
Prof. Lloyd Knox, University of California, Davis, USA, lknox@ucdavis.edu