

# Dr. Jason Rhodes

MS 321-123, 4800 Oak Grove Drive, Pasadena, CA 91109  
+1 626-318-7165 jason.d.rhodes@jpl.nasa.gov

## EDUCATION:

- Princeton University, Ph.D. Physics, 1999; MA Physics, 1996
- Harvey Mudd College, Claremont, CA, BS with High Distinction, Physics, 1994

## EMPLOYMENT:

- 2004-present **Scientist** at NASA's Jet Propulsion Laboratory and Visiting Scholar at the California Institute of Technology, Pasadena, CA; Promoted to **Principal Scientist** (2014) and **Senior Research Scientist** (2016)
- 2015-present **Visiting Senior Scientist** at the Kavli Institute for Physics and Mathematics of the Universe (IPMU), Kashiwa, Japan
- 2003-2004 **Postdoctoral Scholar and SuperNova Acceleration probe (SNAP) Weak Lensing Project Scientist** at the California Institute of Technology
- 2000-2003 **National Research Council Research Associate** at NASA GSFC
- 1999-2000 **Track Athlete** with Reebok Enclave in Washington, DC

## HONORS/AWARDS:

- JPL Voyager Awards for exceptional performance as JPL Roman (WFIRST) Project Scientist, 2016, 2018
- JPL Team Bonus Awards for organizing Keck Spectroscopic program, 2016; for WFIRST leadership, 2018; for Quantum Sensing Initiative, 2020
- NASA@Work Award 2015 for Airships Challenge
- National Academy of Science/Kavli Foundation Fellow, 2015-present
- JPL Explorer Award for developing the Precision Projector Laboratory and ESA/NASA Euclid leadership, 2012
- JPL Mariner Awards for leadership in the international weak lensing community, 2007; using weak lensing to map the distribution of dark matter in space, 2011
- JPL Lew Allen Award (early career award), 2007

## SECURITY CLEARANCE:

- Secure Compartmented Information (SCI) Clearance, 2021-present

## SELECTED ACTIVITIES AND RESPONSIBILITIES:

- Founding Member of the 20-member Euclid Consortium Board (ECB), that governs the ~1600-member Euclid Consortium, 2008-present;
  - Selected by peer review to officially represent NASA on the ECB in 2012
  - ECB Deputy Chair 2020-2021; Chair 2022-2023 (elected by European peers)
- NASA Representative the 13-member ESA Euclid Science Team, 2013-present
  - Selected by peer review in 2012
  - Chair of Euclid Calibration Review, 2015
- US Science Lead for the ESA-led Euclid mission and PI of a ~\$38M NASA grant "Understanding Dark Energy and Gravity with Euclid", 2013-2030

- Lead a ~75-person NASA-funded US science team
- Member of NASA Joint Dark Energy Mission Interim Science Working Group, 2009-2010, NASA Wide Field Infrared Survey Telescope (WFIRST) Science Definition Team, 2011 – 2015; WFIRST/Roman Formulation Science Working Group 2016-2021
- Nancy Grace Roman Space Telescope (formerly WFIRST) JPL Project Scientist (2015-present, ~\$4B NASA mission) & NASA Euclid Deputy Project Scientist (2012-present, \$200M NASA investment)
  - Project Scientist for the \$400M Roman Coronagraph Instrument
  - Roman/Subaru Steering Committee, 2018-present
- Astrophysics lead for JPL Quantum Sensing Initiative, 2020-present
- NASA science leadership workforce development JPL representative (one of 3), 2021-present
  - Helped develop new hire and mid-career NASA science workforce workshops
- Lead of JPL Blue Skies Study “The End of Galaxy Surveys”, 2019-2020
- Founding member of the Tri-Agency (DOE/NASA/NSF) Tri Project (Euclid/Roman/Rubin) task force, 2012-present
  - Extensive contacts at all three major US space science agencies (NASA, NSF, DOE)
  - Euclid TAG representative, 2012-present
  - WFIRST/Roman TAG representative, 2012-2020; co-representative, 2020-present
- Lead JPL Co-I on the Superpressure Balloon Imaging Telescope (SuperBIT) program, 2016-present
- Chair of Keck Telescope Strategic Planning Panel for WFIRST/Euclid, 2015-2016
- NASA IRTF/Keck Users Group (NIKUG), 2016-2019
- Keck Wide Field Imager (KWFI) Science Advisory Committee, 2021-present
- Executive Committee of the NASA Physics of the Cosmos Program Analysis Group (PhysPAG), 2011-2014
- Co-Lead of the “Airships: A New Horizon for Science” Keck Institute for Space Studies workshops series, 2013
- PI of the NASA@Work Airships 20-20-20 Centennial Challenge development, 2014 - present
- US Lead for the Cosmological Advanced Survey Telescope for Optical and uv Research (CASTOR) Canadian Space Agency mission concept, 2018-present
- Founder of JPL/Caltech Optical Observatories (COO) Precision Projector Laboratory (PPL) used to characterize Roman, Euclid, JWST detectors, 2007-present
- Vera Rubin Observatory Legacy Survey of Space and Time (LSST) Dark Energy Science Collaboration (LSST-DESC) Full Member
  - Euclid Liaison to DESC, 2014-present
  - WFIRST/Roman Liaison to DESC, 2014-2021
  - Member of the 5-person LSST-DESC Advisory Committee, 2017-2021 (Chair 2019-2021)
- JPL Office of Strategic Planning lead for engagement with Australia and co-lead for Japan, 2018-present
  - Quarterly meetings with CSIRO USA
- Strong connections with ESA, JAXA & NAOJ, CNES, CSIRO

- Invited reviewer for NASA ROSES, HST, and Keck proposals; Italian, Chilean, UK, Dutch, Canadian research grants
- DOE/NSF Review Boards for DESI and CMBS4, 2019-present
- Supervised 19 postdocs at JPL, 2004-present
- Supervised 20 summer students in the prestigious Caltech Summer Undergraduate Research Fellowship (SURF) program, 2003-present

#### **SELECTED PUBLIC OUTREACH:**

- Public outreach including appearances on NOVA, Through the Wormhole, Japanese TV, South by Southwest (SXSW), two prestigious Von Karman Lectures at JPL and Caltech, AAAS in Washington DC, Planetary Radio
  - 2019 Von Karman lecture with 1100 attendees:  
[https://www.jpl.nasa.gov/events/lectures\\_archive.php?year=2019&month=10](https://www.jpl.nasa.gov/events/lectures_archive.php?year=2019&month=10)
  - 2017 Planetary Radio Podcast:  
<https://www.planetary.org/planetary-radio/0809-jason-rhodes-alina-kiessling>

#### **SELECTED TRAINING COURSES:**

- NASA International Project Management (IPM) Course (APPEL-IPM #19) at Kennedy Space Center, 2018
- “Inside Congress: Understanding the Legislative Process,” Brookings Institution in Washington, DC, 2018
- JPL Earned Value Management Training Course, 2018
- Leadership and Management Skills Using the Kepner Tregoe Decision Matrix Method, 2018
- JPL Project Managers Training Course, 2016

#### **REFERENCES:**

- Dr. Charles Elachi [celachi@caltech.edu](mailto:celachi@caltech.edu) (former Director of JPL)
- Dr. David Spergel [president@simonsfoundation.org](mailto:president@simonsfoundation.org) (President of the Simons Foundation)
- Dave Gallagher [David.B.Gallagher@jpl.nasa.gov](mailto:David.B.Gallagher@jpl.nasa.gov) (JPL Associate Director for Strategic Integration)
- Leslie Livesay [Leslie.L.Livesay@jpl.nasa.gov](mailto:Leslie.L.Livesay@jpl.nasa.gov) (JPL Associate Director for Flight Projects and Mission Success)

#### **LINK TO PUBLICATIONS:**

[author:"Rhodes, Jason" - NASA/ADS \(harvard.edu\)](https://ui.adsabs.org/author/Rhodes,+Jason/)

## **SELECTED PUBLICATIONS:**

- Rhodes et al., "The End of Galaxy Surveys," 2020, *The Astronomical Journal*, 160, 261
- Rhodes et al., "Scientific Synergy between LSST and Euclid, " 2017, *The Astrophysical Journal Supplement Series*, 233, 21
- Rhodes, et al. 2013, "Exploiting Cross Correlations and Joint Analyses", 2015, *Astroparticle Physics*, 63, 42
- Cropper, Hoekstra, Kitching, Amiaux, Massey, Miller, Mellier, Rhodes, Rowe, Pires, Saxton, & Scaramella, 2013, "Defining a Weak Lensing Experiment in Space," *MNRAS*, 431, 3103
- Rhodes et al., 2012, "Space-quality data from balloon-borne telescopes: the High Altitude Lensing Observatory (HALO)," *Astroparticle Physics*, 38, 31
- Massey, Rhodes, et al., 2007, "Dark matter maps reveal cosmic scaffolding," *Nature*, 445, 286
- Rhodes et al., 2004, "Weak Lensing From Space I: Instrumentation and Survey Strategy," *APh*, 20, 377
- Rhodes, Refregier, & Groth, 2000, "Weak Lensing Measurements: A Revisited Method and Application to Hubble Space Telescope Images", *ApJ*, 536, 79