

Robert J. De Rosa

Curriculum Vitae

European Southern Observatory, Santiago Office
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 Santiago, Chile

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Research Interests:

Exoplanets, brown dwarfs, and stellar companions resolved via direct imaging
 Atmospheric characterisation of substellar objects with photometry and spectroscopy

Professional Appointments:

2019 – Present	Assistant Astronomer	European Southern Observatory, Santiago, CL
2018 – 2019	Assistant Project Scientist	Stanford University, Palo Alto, USA
2017 – 2018	Assistant Project Scientist	University of California, Berkeley, USA
2014 – 2017	Postdoctoral Researcher	University of California, Berkeley, USA
2013 – 2014	Postdoctoral Researcher	University of Exeter, UK
2012 – 2014	Postdoctoral Researcher	Arizona State University, USA

Education:

2008 – 2012	PhD	Astrophysics <i>The VAST Survey – Exploring the Multiplicity of Intermediate Mass Stars</i> <i>Supervisor: Jennifer Patience</i>	University of Exeter, UK
2011		GPI Instrument Internship <i>Supervisor: Sandrine Thomas, Bruce Macintosh</i>	University of California, Santa Cruz, USA
2004 – 2008	MPhys	Physics <i>Gas Dynamics in Star Forming Clouds</i> <i>Supervisor: Chris Brunt</i>	University of Exeter, UK

Professional Awards and Grants:

2022	<i>co-I HST General Observer grant (GO-17059), PI: P. Kalas</i>
2021	<i>co-I NASA ADAP grant (21-ADAP21-0130), PI: J. Patience</i>
2021	<i>co-I NASA XRP grant (20-XRP20_2-0065), PI: B. Macintosh</i>
2020	<i>co-I HST General Observer grant (GO-16707), PI: P. Kalas</i>
2019	<i>co-I NSF AST grant (1920180), PI: J. Chilcote</i>
2019	<i>NASA/Keck Principal Investigator Data Award</i>
2013	<i>Royal Society International Exchange (Exeter-Macquarie collaboration)</i>
2011	<i>Finalist, SET For BRITAIN – UK national scientific poster competition</i>
2011	<i>Royal Astronomical Society international travel grant</i>
2011	<i>STFC Overseas Fieldwork Grant for GPI Integration & Testing</i>
2009	<i>Royal Astronomical Society international travel grant</i>

Professional Membership:

Royal Astronomical Society, Institute of Physics, Sociedad Chilena de Astronomía.

Professional Activities:

2023 – Present	<i>Referee, Royal Astronomical Society Techniques and Instruments</i>
2022 – Present	<i>Member, ESO Student Selection Committee, Chile</i>
2021 – Present	<i>Referee, Journal of Astronomical Telescopes, Instruments, and Systems</i>
2021 – Present	<i>Member, ESO ELT High Contrast Imaging Working Group</i>
2021	<i>Co-chair, ESO Star-Planet Connection Workshop SOC</i>
2020 – Present	<i>External Reviewer, HST Time Allocation Committee</i>

- 2019 – 2021 *Member, NOAO Time Allocation Committee*
 2017 – Present *Referee, Astronomy & Astrophysics*
 2017 – Present *Member, Gemini Planet Imager Exoplanet Survey Science Steering Committee*
 2016 – Present *Referee, The Astronomical Journal*
 2016 *Reviewer, NSF Fellowship Panel*
 2015 – Present *Referee, Monthly Notices of the Royal Astronomical Society*
 2013 – Present *Referee, The Astrophysical Journal*

Teaching and Mentoring:

2023	Mentor	<i>Gabriele Verrier, ESO SSDF Student (Apr-Aug 23)</i>
2023	Tutor	<i>ORP 2023 Proposal Writing School</i>
2022	Mentor	<i>Amy Goodsall, ESO Science Intern</i>
2022	Mentor	<i>Savannah Pobre, ESO/ALMA-Princeton Intern</i>
2021	Mentor	<i>Riccardo Ienco, ESO Science Intern</i>
2021	Mentor	<i>Raul Miranda, ESO PSO Summer Intern</i>
2019 – 2022	Mentor	<i>Andrew D. Thomas, Undergraduate Summer Student</i>
2019 – 2022	Mentor	<i>Yilun Ma, Undergraduate Summer Student</i>
2017 – 2020	Mentor	<i>Meiji Nguyen, Undergraduate Research Assistant</i>
2016 – 2017	Mentor	<i>Jeffrey Vargas, Undergraduate Research Assistant</i>
2012 – 2013	Mentor	<i>Ray Sanders, Undergraduate Senior Thesis</i>
2008 – 2010	Demonstrator	<i>Undergraduate Astrophysics Lab</i>
2008 – 2010	Demonstrator	<i>Undergraduate Electronics Lab</i>

Invited and Contributed Talks

- 2022 In the Spirit of Lyot 2022, Leiden, Netherlands (invited review talk)
Direct Imaging of Exoplanets – From the past to the future
- 2022 ESO Friday Lecture Series
Stellar astrometry and Gaia DR3
- 2021 Exoplanet Orbits & Dynamics Workshop, University of Liege, Belgium
Measuring the architectures of multi-planet systems with Hipparcos and Gaia
- 2020 ESO “Thirty Minute Talk” Seminar
Constraining the architecture of the HD 106906 planetary system with the HST
- 2020 ESO “Thirty Minute Talk” Seminar
Pi Mensae – Measuring the system geometry with Hipparcos/Gaia
- 2019 Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA
Exploring the Dynamical History of the HD 106906 Planetary System with Gaia
- 2019 223rd AAS Meeting, Seattle, WA, USA
Exploring the Dynamical History of the HD 106906 Planetary System with Gaia
- 2018 Space Telescope Science Institute, Baltimore, MD, USA
Planet Detection and Characterization with the Gemini Planet Imager
- 2018 Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA
The Gemini Planet Imager Exoplanet Survey
- 2017 CIERA, Northwestern University, IL, USA
The Gemini Planet Imager Exoplanet Survey
- 2016 Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA
Spectroscopic Characterization of HD 95086 b with the Gemini Planet Imager
- 2015 Institute of Geophysics and Planetary Physics Seminar Series, UC Santa Cruz, CA, USA
The Gemini Planet Imager Exoplanet Survey
- 2015 Bay Area Exoplanet Meeting, SETI Institute, Mountain View, CA, USA
Gemini Planet Imager Exoplanet Survey: Campaign Overview & 51 Eridani b
- 2015 ‘In the Spirit of Lyot’, Montreal, Canada
Gemini Planet Imager Exoplanet Survey: Campaign Overview
- 2014 Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA
Gemini Planet Imager: Early Science and the Exoplanet Survey
- 2013 Exoplanets and Brown Dwarfs: Mind the Gap, University of Hertfordshire, Hatfield, UK

- 2013 *Characterising the Frequency and Properties of Substellar Companions to Nearby Stars*
CHARA/NPOI Science Meeting, Lowell Observatory, Flagstaff, AZ, USA
- 2013 *The Seven Sisters and Their Friends. A high-resolution multiplicity survey of Pleiades B stars*
221st AAS Meeting, Long Beach, CA, USA
- 2011 *The Volume-limited A-Star (VAST) Survey: The Multiplicity of A-type Stars*
‘‘pas de deux’’ in the Solar System and the Milky Way’, Paris Observatory, France
- 2011 *Binaries with A-type Primaries: A comparison between dynamical masses and theory*
USNO Flagstaff Station, AZ, USA
- 2010 *The Volume-Limited A-Star (VAST) Survey*
- 2010 ‘Origin of Stellar Masses’, Tenerife, Spain
- 2010 *A-star Multiplicity and the Companion Mass Function – The VAST Survey*
CFHT Observatory, Gemini Observatory, and Keck Observatory, HI, USA
- 2010 *A High-angular resolution Investigation of Nearby A-stars*

Robert J. De Rosa

List of Publications

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NASA/ADS: <https://ui.adsabs.harvard.edu/public-libraries/ZgxAvZDtRGuDKtUe1-tYHg>

ORCID/ADS libraries include refereed articles and SPIE conference proceedings

Peer-reviewed, first author

1. **De Rosa, R. J.**, Nielsen, E. L., Wahhaj, Z. et al. 2023, *Direct imaging discovery of a super-Jovian around the young Sun-like star AF Leporis*, Astronomy & Astrophysics, 672, 94
2. **De Rosa, R. J.**, Dawson, R., Nielsen, E. L. 2020, *A significant mutual inclination between the planets within the π Mensae system*, Astronomy & Astrophysics, 640, A73
3. **De Rosa, R. J.**, Nguyen, M. M., Chilcote, J. et al. 2020, *Revised Astrometric Calibration of the Gemini Planet Imager*, Journal of Astronomical Telescopes, Instruments, and Systems, 6a, 5006
4. **De Rosa, R. J.**, Nielsen, E. L., Wang, J. J. et al. 2020, *An updated visual orbit of the directly-imaged exoplanet 51 Eridani b and prospects for a dynamical mass measurement with Gaia*, The Astronomical Journal, 159, 1
5. **De Rosa, R. J.**, Nielsen, E. L., Rameau, J. et al. 2019, *Detection of a low-mass stellar companion to the accelerating A2IV star HR 1645*, The Astronomical Journal, 158, 226
6. **De Rosa, R. J.**, Esposito, T. M., Hirsch, L. et al. 2019, *The possible astrometric signature of planetary-mass companion to the nearby young star TW Piscis Austrini: Constraints from astrometry, radial velocities and direct imaging*, The Astronomical Journal, 158, 225
7. **De Rosa, R. J.**, Kalas, P. G. 2019, *A near-coplanar Stellar Flyby of the Planet Host Star HD 106906*, The Astronomical Journal, 157, 125
8. **De Rosa, R. J.**, Rameau, J., Patience, J. et al. 2016, *Spectroscopic Characterization of HD 95086 b with the Gemini Planet Imager*, The Astrophysical Journal, 824, 121
9. **De Rosa, R. J.**, Nielsen, E. L., Blunt, S. C. et al. 2015, *Astrometric Confirmation and Preliminary Orbital Parameters of the Young Exoplanet 51 Eridani b with the Gemini Planet Imager*, The Astrophysical Journal, 814, L3
10. **De Rosa, R. J.**, Patience, J., Ward-Duong, K. et al. 2014, *The VAST Survey - IV. A wide brown dwarf companion to the A3V star ζ Delphini*, Monthly Notices of the Royal Astronomical Society, 445, 3694
11. **De Rosa, R. J.**, Patience, J., Wilson, P. A. et al. 2014, *The VAST Survey - III. The multiplicity of A-type stars within 75 pc*, Monthly Notices of the Royal Astronomical Society, 437, 1216
12. **De Rosa, R. J.**, Patience, J., Vigan, A. et al. 2012, *The Volume-limited A-Star (VAST) survey - II. Orbital motion monitoring of A-type star multiples*, Monthly Notices of the Royal Astronomical Society, 422, 2765
13. **De Rosa, R. J.**, Bulger, J., Patience, J. et al. 2011, *The Volume-limited A-Star (VAST) survey - I. Companions and the unexpected X-ray detection of B6-A7 stars*, Monthly Notices of the Royal Astronomical Society, 415, 854

Peer-reviewed, significant contributions (\dagger student-led)

1. Zhang, S. Y., Duchêne, G., **De Rosa, R. J.** et al. 2023, *Testing the Interaction Between a Substellar Companion and a Debris Disk in the HR 2562 System*, The Astronomical Journal, 165, 219
2. Escorza, A. & **De Rosa, R. J.** 2023, *Barium and related stars, and their white-dwarf companions. III. The masses of the white dwarfs*, Astronomy & Astrophysics, 671, 97
3. Duchêne, G., Oon, J. T., **De Rosa, R. J.** et al. 2022, *A low-mass companion desert among intermediate-mass visual binaries: The scaled-up counterpart to the brown dwarf desert*, Monthly Notices of the Royal Astronomical Society, 519, 778
4. Escorza, A., Karinkuzhi, D., Jorissen, A. et al. 2023, *A neutron star candidate in the long-period binary 56 UMa*, Astronomy & Astrophysics, 670, 14
5. Currie, T., Biller, B., Lagrange, A.-M. et al. 2022, *Direct Imaging and Spectroscopy of Extrasolar Planets*, review chapter for Protostars and Planets VII conference, *in press*

6. Jones, M. I., Milli, J., Blanchard, I. et al. 2022, *SPHERE adaptive optics performance for faint targets*, *Astronomy & Astrophysics*, 667, A114
7. Balmer, W. O., Follette, K. B., Close, L. M. et al. 2022, *Improved Orbital Constraints and H-alpha Photometric Monitoring of the Directly Imaged Protoplanet Analog HD142527B*, *The Astronomical Journal*, *in press*
8. Ma, Y., **De Rosa, R. J.**, Kalas, P. 2022, *Search for Stellar Flybys in the Sco-Cen OB Association with the Gaia DR2*, *The Astronomical Journal*, 163, 219
9. Wang, J. J., Vigan, A., Lacour, S. et al. 2021, *Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY*, *The Astronomical Journal*, 161, 148
10. Nguyen, M. M., **De Rosa, R. J.**, Kalas, P. 2020, *First detection of orbital motion for HD 106906 b: A wide-separation exoplanet on a Planet Nine-like orbit*, *The Astronomical Journal*, 161, 22
11. Ward-Duong, K., Patience, J., Follette, K., **De Rosa, R. J.** et al. 2020, *Gemini Planet Imager Spectroscopy of the Dusty Substellar Companion HD 206893 B*, *The Astronomical Journal*, 161, 5
12. Stanford-Moore, S. A., Nielsen, E. L., **De Rosa, R. J.** et al. 2020, *BAFFLES: Bayesian Ages for Field Lower-Mass Stars*, *The Astronomical Journal*, 898, 1
13. Esposito, T. M., Kalas, P., Fitzgerald, M. P. et al. 2019, *Debris Disk Results from the Gemini Planet Imager Exoplanet Survey's Polarimetric Imaging Campaign*, *The Astronomical Journal*, 160, 24
14. Wang, J. J., Ginzburg, S., Ren, B. et al. 2020, *Keck/NIRC2 L'-Band Imaging of Jovian-Mass Accreting Protoplanets around PDS 70*, *The Astronomical Journal*, 159, 263
15. Nguyen, M. M., **De Rosa, R. J.**, Wang, J. J. et al. 2020, *HD 165054: an astrometric calibration field for high-contrast imagers in Baade's Window*, *The Astronomical Journal*, 159, 244
16. Nielsen, E., **De Rosa, R. J.**, Wang, J. J. et al. 2019, *The Gemini Planet Imager Exoplanet Survey: Dynamical Mass of the Exoplanet β Pictoris b from Combined Direct Imaging and Astrometry*, *The Astronomical Journal*, 159, 71
17. Uyama, T., Currie, T., Hori, Y., **De Rosa R. J.** et al. 2019, *Atmospheric Characterization and Further Orbital Monitoring of κ And B*, *The Astronomical Journal*, 159, 40
18. Blunt, S., Wang, J., Angelo, I. et al. 2019, *orbitize!: A Comprehensive Orbit-fitting Software Package for the High-Contrast Imaging Community*, *The Astronomical Journal*, 159, 89
19. Ruffio, J.-B., Macintosh, B., Konopacky, Q. M. et al. 2019, *Radial Velocity Measurements of HR 8799 b and c with Medium Resolution Spectroscopy*, *The Astronomical Journal*, 158, 200
20. Nielsen, E., **De Rosa, R. J.**, Macintosh, B. et al. 2019, *The Gemini Planet Imager Exoplanet Survey: Giant Planet and Brown Dwarf Demographics From 10–100 au*, *The Astronomical Journal*, 158, 13
21. Ruffio, J.-B., Mawet, D., Czekala, I. et al. 2018, *A Bayesian Framework for Exoplanet Direct Detection and Non-Detection*, *The Astronomical Journal*, 156, 196
22. Greenbaum, A. Z., Pueyo, L., Ruffio, J.-B. et al. 2018, *GPI Spectra of HR 8799 c, d, and e from 1.5 to 2.4 μ m with KLIP Forward Modeling*, *The Astronomical Journal*, 155, 226
23. Nielsen, E., **De Rosa, R. J.**, Rameau, J. et al. 2017, *Evidence that the Directly-Imaged Planet HD 131399 Ab is a Background Star*, *The Astronomical Journal*, 154, 218
24. Rajan, A., Rameau, J., **De Rosa, R. J.** et al. 2017, *Characterizing 51 Eri b from 1-5 μ m: a partly-cloudy exoplanet*, *The Astronomical Journal*, 154, 10
25. Blunt, S., Nielsen, E., **De Rosa, R. J.** et al. 2017, *Orbits for the Impatient: A Bayesian Rejection Sampling Method for Quickly Fitting the Orbits of Long-Period Exoplanets*, *The Astronomical Journal*, 153, 229
26. Johnson-Groh, M., Marois, C., **De Rosa, R. J.** et al. 2017, *Integral Field Spectroscopy of the Low-mass Companion HD 984 B with the Gemini Planet Imager*, *The Astronomical Journal*, 153, 190
27. Chilcote, J., Pueyo, L., **De Rosa, R. J.** et al. 2017, *1 to 2.4 μ m Near-IR Spectrum of the Giant Planet β Pictoris obtained with the Gemini Planet Imager*, *The Astronomical Journal*, 153, 182
28. Nielsen, E. L., **De Rosa, R. J.**, Wang, J. et al. 2016, *Dynamical Mass Measurement of the Young Spectroscopic Binary V343 Nor AaAb Resolved with the Gemini Planet Imager*, *The Astronomical Journal*, 152, 6
29. Wang, J. J., Graham, J. R., Pueyo, L. et al. 2016, *The Orbit and Transit Prospects for β Pictoris b constrained with One Milliarcsecond Astrometry*, *The Astronomical Journal*, 152, 97
30. Rameau, J., Nielsen, E. L., **De Rosa, R. J.** et al. 2016, *Constraints on the Architecture of the HD 95086 Planetary System with the Gemini Planet Imager*, *The Astrophysical Journal*, 822, L29

31. Macintosh, B., Graham, J. R., Barman, T., **De Rosa, R. J.** et al. 2015, *Discovery and spectroscopy of the young jovian planet 51 Eri b with the Gemini Planet Imager*, Science, 350, 64
32. Wang, J. J., Graham, J. R., Pueyo, L. et al. 2015, *Gemini Planet Imager Observations of the AU Microscopii Debris Disk: Asymmetries within One Arcsecond*, The Astrophysical Journal, 811, L19
33. Ward-Duong, K., Patience, J., **De Rosa, R. J.** et al. 2015, *The M-dwarfs in Multiples (MINMS) survey - I. Stellar multiplicity among low-mass stars within 15 pc*, Monthly Notices of the Royal Astronomical Society, 449, 2618
34. Patience, J., King, R. R., **De Rosa, R. J.** et al. 2012, *Spectroscopy across the brown dwarf/planetary mass boundary. I. Near-infrared JHK spectra*, Astronomy & Astrophysics, 540, A85
35. Patience, J., King, R. R., **De Rosa, R. J.**, Marois, C. 2010, *The highest resolution near infrared spectrum of the imaged planetary mass companion 2M1207 b*, Astronomy & Astrophysics, 517, A76

Peer-reviewed, other

1. Follette, K. B., Close, L. M., Males, J. R. et al. 2023, *The Giant Accreting Protoplanet Survey (GAPlanetS)-Results from a 6 yr Campaign to Image Accreting Protoplanets*, The Astronomical Journal, 165, 225
2. Davies, R., Absil, O., Agapito, G. et al. 2023, *The Enhanced Resolution Imager and Spectrograph for the VLT*, Astronomy & Astrophysics, *in press*
3. Thompson, W., Marois, C., Do Ó, C. R. et al. 2022, *Deep orbital search for additional planets in the HR 8799 system*, The Astronomical Journal, 165, 29
4. Shuai, L., Ren, B. B., Dong, R. et al. 2022, *Stellar Flyby Analysis for Spiral Arm Hosts with Gaia EDR3*, The Astrophysical Journal Supplement Series, 263, 31
5. Wang, J. J., Gao, P., Chilcote, J. et al. 2022, *Atmospheric Monitoring and Precise Spectroscopy of the HR 8799 planets with SCExAO/CHARIS*, The Astronomical Journal, 164, 143
6. Ruffio, J. B., Konopacky, Q. M., Barman, T. et al. 2021, *Deep exploration of the planets HR 8799 b, c, and d with moderate resolution spectroscopy*, The Astronomical Journal, 162, 290
7. Hirsch, L., Rosenthal, L., Fulton, B. J. et al. 2021, *Understanding the Impacts of Stellar Companions on Planet Formation and Evolution: A Survey of Stellar and Planetary Companions within 25 pc*, The Astronomical Journal, 161, 134
8. Jensen-Clem, R., Millar-Blanchaer, M. A., van Holstein, R. G. et al. 2020, *A Search for Polarized Thermal Emission from Directly-imaged Exoplanets and Brown Dwarf Companions to Nearby Stars*, The Astronomical Journal, 160, 286
9. Chakrabarti, S., Wright, J., Chang, P. et al. 2020, *Towards a direct measure of the Galactic acceleration*, The Astronomical Journal Letters, 902, L28
10. Arriaga, P., Fitzgerald, M. P., Duchêne, G. et al. 2020, *Multiband Polarimetric Imaging of HR 4796A with the Gemini Planet Imager*, The Astronomical Journal, 160, 79
11. Chen, C., Mazoyer, J., Poteet, C. A. et al. 2020, *Multi-band GPI Imaging of the HR 4796A Debris Disk*, The Astrophysical Journal, 898, 55
12. Duchêne, G., Rice, M., Hom, J. et al. 2020, *The Gemini Planet Imager view of the HD 32297 debris disk*, The Astronomical Journal, 159, 251
13. Bruzzone, J. S., Metchev, S., Duchêne, G. et al. 2019, *Imaging the 44 au Kuiper Belt-Analogue Debris Ring Around HD 141569A with GPI Polarimetry*, The Astronomical Journal, 159, 53
14. Hom, J., Patience, J., Esposito, T. M. et al. 2019, *First Resolved Scattered-Light Images of Four Debris Disks in Scorpius-Centaurus with the Gemini Planet Imager*, The Astronomical Journal, 159, 31
15. Rodet, L., Beust, H., Bonnefoy, M. et al. 2019, *ODEA: Orbital Dynamics in a complex Evolving Architecture—Application to the planetary system HD 106906*, Astronomy & Astrophysics, 631, A139
16. Vides, C. L., Macintosh, B., Binder, B. A. et al. 2019, *Model of the Search For Extraterrestrial Intelligence with Coronagraphic Imaging*, The Astronomical Journal, 158, 207
17. Ren, B., Choquet, E., Perrin, M. D. et al. 2019, *An Exo-Kuiper Belt And An Extended Halo Around HD 191089 in Scattered Light*, The Astrophysical Journal, 882, 64

18. Newton, E. R., Mann, A. W., Tofflemire, B. M. et al. 2019, *TESS Hunt for Young and Maturing Exoplanets (THYME): A planet in the 45 Myr Tucana-Horologium association*, The Astrophysical Journal Letters, 880, 17
19. Greenbaum, A. Z., Cheetham, A., Sivaramakrishnan, A. et al. 2019, *Performance of the Gemini Planet Imager Non-redundant Mask and Spectroscopy of Two Close-separation Binaries: HR 2690 and HD 142527*, The Astronomical Journal, 157, 249
20. Stone, J. M., Skemer, A. J., Hinz, P. M. et al. 2018, *The LEECH Exoplanet Imaging Survey: Limits on Planet Occurrence Rates Under Conservative Assumptions*, The Astronomical Journal, 156, 286.
21. Wang, J. J., Graham, J. R., Dawson, R. et al. 2018, *Dynamical Constraints on the HR 8799 Planets with GPI*, The Astronomical Journal, 156, 192.
22. Esposito, T. M., Duchêne, G., Kalas, P. et al. 2018, *Direct Imaging of the HD 35841 Debris Disk: A Polarized Dust Ring from Gemini Planet Imager and an Outer Halo from HST/STIS*, The Astronomical Journal, 156, 47.
23. Wang, J. J., Perrin, M. D., Savransky, D. et al. 2018, *Automated data processing architecture for the Gemini Planet Imager Exoplanet Survey*, JATIS, 4, 18002
24. Ward-Duong, K., Patience, J., Bulger, J. et al. 2017, *The Taurus Boundary of Stellar/Substellar (TBOSS) Survey II. Disk Masses from ALMA Continuum Observations*, The Astronomical Journal, 155, 54
25. Garcia, E. V., Ammons, S. M., Salma, M. et al. 2017, *Individual, Model-Independent Masses of the Closest Known Brown Dwarf Binary to the Sun*, The Astrophysical Journal, 846, 97
26. Ruffio, J.-B., Macintosh, B., Wang, J. J. et al. 2017, *Improving and Assessing Planet Sensitivity of the GPI Exoplanet Survey with a Forward Model Matched Filter*, The Astronomical Journal, 842, 14
27. Rameau, J., Follette, K. B., Pueyo, L. et al. 2017, *An Optical/near-infrared investigation of HD 100546 b with the Gemini Planet Imager and MagAO*, The Astronomical Journal, 153, 244
28. Follette, K. B., Rameau, J., Dong, R. et al. 2017, *Complex Spiral Structure in the HD 100546 Transitional Disk as Revealed by GPI and MagAO*, The Astronomical Journal, 153, 264
29. Duchêne, G., Becker, A., Yang, Y. et al. 2017, *A search for passive protoplanetary disks in the Taurus-Auriga star-forming region*, Monthly Notices of the Royal Astronomical Society, 469, 1783
30. Gaidos, E., Mann, A. W., Rizzuto, A. et al. 2017, *Zodiacal Exoplanets in Time (ZEIT) II. A “Super-Earth” Orbiting a Young K Dwarf in the Pleiades Neighborhood*, Monthly Notices of the Royal Astronomical Society, 464, 850
31. Esposito, T. M., Fitzgerald, M. P., Graham, J. R. et al. 2016, *Bringing “The Moth” to Light: A Planet-sculpting Scenario for the HD 61005 Debris Disk*, The Astronomical Journal, 152, 85
32. Millar-Blanchaer, M. A., Wang, J., Kalas, P. et al. 2016, *Imaging an 80 AU Radius Dust Ring Around the F5V Star HD 157587*, The Astronomical Journal, 152, 128
33. Konopacky, Q. M., Rameau, J., Duchêne, G. et al. 2016, *Discovery of a Substellar Companion to the Nearby Debris Disk Host HR 2562*, The Astrophysical Journal, 829, L4
34. Skemer, A. J., Morley, C. V., Zimmerman, N. T. et al. 2016, *The LEECH Exoplanet Imaging Survey: Characterization of the Coldest Directly Imaged Exoplanet, GJ 504 b, and Evidence for Superstellar Metallicity*, The Astrophysical Journal, 817, 166
35. Hung, L.-W., Duchêne, G., Arriaga, P. et al. 2015, *First Scattered-light Image of the Debris Disk around HD 131835 with the Gemini Planet Imager*, The Astrophysical Journal, 815, L14
36. Kalas, P. G., Rajan, A., Wang, J. J. et al. 2015, *Direct Imaging of an Asymmetric Debris Disk in the HD 106906 Planetary System*, The Astrophysical Journal, 814, 32
37. Millar-Blanchaer, M. A., Graham, J. R., Pueyo, L. et al. 2015, *Beta Pictoris' Inner Disk in Polarized Light and New Orbital Parameters for Beta Pictoris b*, The Astrophysical Journal, 811, 18
38. Rajan, A., Patience, J., Wilson, P. A. et al. 2015, *The brown dwarf atmosphere monitoring (BAM) project - II. Multi-epoch monitoring of extremely cool brown dwarfs*, Monthly Notices of the Royal Astronomical Society, 448, 3775
39. Maire, A.-L., Skemer, A. J., Hinz, P. M. et al. 2015, *The LEECH Exoplanet Imaging Survey. Further constraints on the planet architecture of the HR 8799 system*, Astronomy & Astrophysics, 576, A133

40. Perrin, M. D., Duchene, G., Millar-Blanchaer, M. et al. 2015, *Polarimetry with the Gemini Planet Imager: Methods, Performance at First Light, and the Circumstellar Ring around HR 4796A*, The Astrophysical Journal, 799, 182
41. Chilcote, J., Barman, T., Fitzgerald, M. P. et al. 2015, *The First H-band Spectrum of the Giant Planet β Pictoris b*, The Astrophysical Journal, 798, L3
42. Ingraham, P., Marley, M. S., Saumon, D. et al. 2014, *Gemini Planet Imager Spectroscopy of the HR 8799 Planets c and d*, The Astrophysical Journal, 794, L15
43. Macintosh, B., Graham, J. R., Ingraham, P. et al. 2014, *First light of the Gemini Planet Imager*, Proceedings of the National Academy of Science, 111, 12661
44. Rodigas, T. J., Debes, J. H., Hinz, P. M. et al. 2014, *Does the Debris Disk around HD 32297 Contain Cometary Grains?*, The Astrophysical Journal, 783, 21
45. Bulger, J., Hufford, T., Schneider, A. et al. 2013, *Submillimeter observations of IRAS and WISE debris disk candidates*, Astronomy & Astrophysics, 556, A119
46. Vigan, A., Patience, J., Marois, C. et al. 2012, *The International Deep Planet Survey. I. The frequency of wide-orbit massive planets around A-stars*, Astronomy & Astrophysics, 544, A9

Conference proceedings/Other

1. **De Rosa, R. J.**, Otarola, A., Szeifert, T. et al. 2023, *Effects of the Hunga Tonga—Hunga Ha'apai Volcanic Eruption on Observations at Paranal Observatory*, The Messenger, 190, 58
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