

Robert J. De Rosa

Curriculum Vitae

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

Professional Awards and Grants:

2019	<i>NASA/Keck Principal Investigator Data Award (\$11,100)</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, American Astronomical Society.

Professional Activities:

2019 – Present	<i>Member, NOAO Time Allocation Committee</i>
2017 – Present	<i>Referee, Astronomy & Astrophysics</i>
2017 – Present	<i>Member, Gemini Planet Imager Exoplanet Survey Science Steering Committee</i>
2016 – Present	<i>Referee, The Astronomical Journal</i>
2016	<i>Reviewer, NSF Fellowship Panel</i>
2016 – Present	<i>Member, Gemini Planet Imager Exoplanet Survey Individual Development Plan Committee</i>
2015 – Present	<i>Referee, Monthly Notices of the Royal Astronomical Society</i>
2013 – Present	<i>Referee, The Astrophysical Journal</i>

Teaching and Mentoring:

2019 – 2020	Mentor	<i>Andrew D. Thomas, Undergraduate Summer Student</i>
2019 – 2020	Mentor	<i>Yihun 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>

PI Telescope Time Allocations:

CFHT/AOBIR	120 hours	<i>AO imaging of A and B-type stars in the field and the Pleiades</i>
Gemini/GNIRS	0.8 hours	<i>Near-IR spectroscopy of a substellar companion to an A-star</i>
Gemini/NIRI	11.6 hours	<i>AO imaging of stellar/substellar companions to A-type stars</i>
Gemini/GPI	10 hours	<i>Search for substellar companions to A-stars with accelerations</i>
Keck/NIRC2	20 hours	<i>NRM imaging of young moving group binaries</i>
Lick/APF	72 hours	<i>RV monitoring of young moving group binaries</i>
Lick/ShaneAO	80 hours	<i>AO imaging of faint companions to nearby A-type stars</i>
MMT/ARIES	40 hours	<i>AO imaging and spectroscopy of young substellar objects</i>
VATT/VATT4k	20 hours	<i>Direct imaging of wide stellar companions to A-type stars</i>
VLT/NaCo	6.2 hours	<i>AO imaging of M-dwarf binaries</i>

Other Observing and Data Analysis Experience:

AEOS/VisIm	<i>Visible-light AO observations of companions to A-type stars</i>
Gemini/GPI	<i>Large 900-hour exoplanet survey around young, nearby stars</i>
La Silla/HARPS	<i>Radial velocity monitoring of young, nearby stars</i>
LBT/LMIRcam	<i>Thermal-IR AO observations of substellar companions to nearby stars</i>
Lick/IRCAL	<i>AO observations of companions to A-type stars</i>
MMT/SWIRC	<i>Near-IR photometric monitoring of cool brown dwarfs</i>
NPOI	<i>Interferometric search for companions within the Pleiades</i>
NTT/Sofi	<i>Near-IR photometric monitoring of cool brown dwarfs</i>
Palomar/PHARO	<i>AO observations of companions to A-type stars</i>
Perkins/Mimir	<i>Near-IR photometric monitoring of cool brown dwarfs</i>
VATT/VATTSpec	<i>Optical spectroscopy of solar-type companions to A-type stars</i>
VLT/SINFONI	<i>IFU spectroscopy of planetary-mass companions to nearby stars</i>
WHT/INGRID	<i>AO observations of companions to A-type stars</i>
WHT/ISIS	<i>Optical spectroscopy of weak-lined T-Tauri stars</i>

Invited and Contributed Talks

2018	Space Telescope Science Institute, Baltimore, MD, USA <i>Planet Detection and Characterization with the Gemini Planet Imager</i>
2018	Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA <i>The Gemini Planet Imager Exoplanet Survey</i>
2017	CIERA, Northwestern University, IL, USA <i>The Gemini Planet Imager Exoplanet Survey</i>
2016	Center for Integrative Planetary Science Seminar, UC Berkeley, CA, USA <i>Spectroscopic Characterization of HD 95086 b with the Gemini Planet Imager</i>
2015	Institute of Geophysics and Planetary Physics Seminar Series, UC Santa Cruz, CA, USA <i>The Gemini Planet Imager Exoplanet Survey</i>
2015	Bay Area Exoplanet Meeting, SETI Institute, Mountain View, CA, USA <i>Gemini Planet Imager Exoplanet Survey: Campaign Overview & 51 Eridani b</i>
2015	'In the Spirit of Lyot', Montreal, Canada <i>Gemini Planet Imager Exoplanet Survey: Campaign Overview</i>

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

Robert J. De Rosa

List of Publications

Peer-reviewed, first author

1. **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.
2. **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
3. **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
4. **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
5. **De Rosa, R. J.**, Esposito, T. M., Hirsch, L. et al. 2019, *Constraints on planetary-mass companions to the nearby young star TW Piscis Austrini from astrometry, radial velocities and direct imaging*, *The Astronomical Journal*, 158, 225
6. **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
7. **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
8. **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
9. **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
10. **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
11. **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
12. **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 († student-led)

1. Wang, J. J., Vigan, A., Lacour, S. et al. 2020, *Constraining the Nature of the PDS 70 Protoplanets with VLTI/GRAVITY*, *The Astronomical Journal*, *submitted*
2. † Nguyen, M. M., **De Rosa, R. J.**, Kalas, P. G. 2020, *First detection of orbital motion for HD 106906 b: A wide-separation exoplanet on a Planet Nine-like orbit*, *The Astronomical Journal*, *accepted*
3. 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
4. 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
5. 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
6. 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

7. † 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
8. 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
9. 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
10. 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
11. 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
12. 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
13. 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
14. 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
15. 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
16. 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
17. 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
18. 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
19. 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
20. Nielsen, E. L., **De Rosa, R. J.**, Wang, J. et al. 2016, *Dynamical Mass Measurement of the Young Spectroscopic Binary V343 Normae AaAb Resolved with the Gemini Planet Imager*, The Astronomical Journal, 152, 6
21. 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
22. 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
23. 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
24. 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
25. 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
26. 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 and Astrophysics, 540, A85
27. 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 and Astrophysics, 517, A76

Peer-reviewed, other

1. Hirsch, L., Rosenthal, L., Fulton, B. J. et al. 2020, *Understanding the Impacts of Stellar Companions on Planet Formation and Evolution: A Survey of Stellar and Planetary Companions within 25 pc*, *The Astronomical Journal*, *accepted*
2. 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
3. Chakrabarti, S., Wright, J., Chang, P. et al. 2020, *Towards a direct measure of the Galactic acceleration*, *The Astronomical Journal Letters*, 902 L28
4. 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
5. 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
6. 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
7. 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
8. 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
9. 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
10. 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 and Astrophysics*, 631, A139
11. 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
12. 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
13. 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
14. 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
15. 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.
16. 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.
17. 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.
18. 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
19. 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
20. 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
21. 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

22. 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
23. 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
24. 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
25. 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
26. 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
27. 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
28. 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
29. 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
30. 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
31. 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
32. 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
33. 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
34. 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 and Astrophysics, 576, A133
35. 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
36. 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
37. 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
38. 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
39. 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
40. Bulger, J., Hufford, T., Schneider, A. et al. 2013, *Submillimeter observations of IRAS and WISE debris disk candidates*, Astronomy and Astrophysics, 556, A119
41. 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 and Astrophysics, 544, A9

Conference proceedings

1. Macintosh, B., Chilcote, J. K., Bailey, V. P. et al. 2018, *The Gemini planet imager: looking back over five years and forward to the future*, Proc. SPIE 10703

2. Chilcote, J. K., Bailey, B. P., **De Rosa, R. J.** et al. 2018, *Upgrading the Gemini planet imager: GPI 2.0*, Proc. SPIE 10703
3. Savransky, D., Shapiro, J., Bailey, V. et al. 2018, *Mining of the GPIES Database*, Proc. SPIE 10703
4. Wang, J. J., Perrin, M. D., Savransky, D. et al. 2017, *The automated data processing architecture for the GPI Exoplanet Survey*, Proc. SPIE 10400
5. Bailey, V. P., Poyneer, L. A., Macintosh, B. A. et al. 2016, *Status and performance of the Gemini Planet Imager adaptive optics system*, Proc. SPIE 9909
6. Marois, C., Correia, C., Galicher, R. et al. 2014, *GPI PSF subtraction with TLOCI: the next evolution in exoplanet/disk high-contrast imaging*, Proc. SPIE 9148
7. Skemer, A. J., Hinz, P., Esposito, S. et al. 2014, *High contrast imaging at the LBT: the LEECH exoplanet imaging survey*, Proc. SPIE 9148
8. Poyneer, L. A., **De Rosa, R. J.**, Macintosh, B. et al. 2014, *On-sky performance during verification and commissioning of the Gemini Planet Imager's adaptive optics system*, Proc. SPIE 9148
9. Maire, J., Ingraham, P. J., **De Rosa, R. J.** et al. 2014, *Gemini planet imager observational calibrations VI: photometric and spectroscopic calibration for the integral field spectrograph*, Proc. SPIE 9147
10. Konopacky, Q. M., Thomas, S. J. Macintosh, B. A. et al. 2014, *Gemini planet imager observational calibrations V: astrometry and distortion*, Proc. SPIE 9147
11. Wang, J. J., Rajan, A., Graham, J. R. et al. 2014, *Gemini planet imager observational calibrations VIII: characterization and role of satellite spots*, Proc. SPIE 9147
12. Perrin, M. D., Maire, J., Ingraham, P. et al. 2014, *Gemini Planet Imager observational calibrations I: Overview of the GPI data reduction pipeline*, Proc. SPIE 9147
13. **De Rosa, R. J.**, Smith, B., Bulger, J. et al. 2014, *Debris Disks and Multiplicity within the 75pc Volume-limited A-Star (VAST) Survey*, Proc. IAU Symposium, 299, 334
14. Rajan, A., Wilson, P. A., Patience, J. et al. 2014, *Searching for Photometric Variability across the L, T & Y Dwarf Sequence*, Proc. IAU Symposium, 299, 301
15. Ward-Duong, K., Patience, J., **De Rosa, R. J.** et al. 2014, *A Direct Imaging Study to Search for and to Characterize Planetary Mass Companions*, Proc. IAU Symposium, 299, 74
16. Savransky, D., Macintosh, B. A. Thomas, S. J. et al. 2012, *Focal plane wavefront sensing and control for ground-based imaging*, Proc. SPIE 8447
17. Thomas, S., Poyneer, L., Savransky, D. et al. 2012, *Wavefront sensing and correction with the Gemini Planet Imager*, Proc. SPIE 8447
18. **De Rosa, R. J.**, Patience, J., Vigan, A. et al. 2012, *Binaries with A-type primaries - A comparison between dynamical masses and theoretical models*, Proc. "Orbital Couples: Pas de Deux in the Solar System and the Milky Way", 45
19. Thomas, S. J., Poyneer, L., **De Rosa, R. J.** et al. 2011, *Integration and test of the Gemini Planet Imager*, Proc. SPIE 8149
20. Patience, J., King, R., **De Rosa, R. J.** et al. 2010, *Target preparation for direct imaging planet searches*, Proc. "In the Spirit of Lyot 2010", 21