

Emily Rickman

ADDRESS: Space Telescope Science Institute, 3700 San Martin Drive, Baltimore, MD 21218, USA

CONTACT TELEPHONE: 443-531-8600

EMAIL: erickman@stsci.edu | WEBSITE: www.emilyrickman.com

Research interests: Detection and characterization of exoplanets and brown dwarfs; high-contrast imaging; atmospheric characterization; integral field spectroscopy; coronagraphy; radial velocities; astrometry; interferometry; orbital monitoring

EDUCATION

JUNE 2020	Ph.D., Astronomy & Astrophysics University of Geneva, Switzerland. Supervisor: Prof. Damien Ségransan <i>“Direct Imaging and Spectral Characterisation of Long Period Exoplanets and Brown Dwarfs”</i>
JUNE 2016	Master of Physics & Astrophysics University of Sheffield, UK. Supervisor: Prof. Simon Goodwin Classification: 1 st Class with Honours

PROFESSIONAL EXPERIENCE

NOVEMBER 2022 – PRESENT	Science Operation Scientist European Space Agency, Space Telescope Science Institute, Baltimore, USA
SEPTEMBER 2020 – OCTOBER 2022	European Space Agency (ESA) Research Fellow Space Telescope Science Institute, Baltimore, USA
JUNE 2020 – AUGUST 2020	Postdoctoral Researcher University of Geneva, Switzerland. Supervisor: Prof. Damien Ségransan
JULY 2016 – JUNE 2020	Postgraduate Researcher University of Geneva, Switzerland. Supervisor: Prof. Damien Ségransan
SEPTEMBER 2015 – JUNE 2016	Research Assistant University of Sheffield, UK. Supervisor: Prof. Simon Goodwin
JUNE 2015 – AUGUST 2015	Undergraduate Research Assistant University of Sheffield, UK. Supervisor: Dr. Emiliano Cancellieri
JULY 2014 – JUNE 2015	Undergraduate Research Assistant Australian National University, Australia. Supervisor: Prof. Mike Ireland

PROFESSIONAL SERVICE

Since 2020	ESA/Hubble Space Telescope Press Release Outreach Review Committee , Scientific Reviewer
Since 2021	AAS <i>Astrophysical Journal</i> , Reviewer
Since 2021	STScI Exoplanet, Star & Planet Formation Seminar Series , Co-Organizer
Since 2021	STScI Extrasolar Planetary Systems Imaging Group , Group Meeting Co-Organizer
Since 2022	NASA Exoplanet Study Analysis Group 23 , subject area lead
Since 2022	First Science Results from JWST , Scientific Organizing Committee
Since 2022	STScI Symposium 2023 , Scientific Organizing Committee
2022	NASA’s Exoplanet Research Program (XRP) Review , Panel Chair and Reviewer
2022	TESS Cycle 5 Review Member , Panelist
2021	NASA’s Exoplanet Research Program (XRP) Review , Panel Chair and Reviewer
2021	ESO Exoplanet Atmospheres Workshop , Scientific Organizing Committee
2021	TESS Cycle 4 Review Member , Panelist
2021	JWST Cycle 1 Review Member , Panel Support Scientist
2021	HST Cycle 29 Review Member , Panel Support Scientist
2021	The 20.5th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun. Awarded Splinter Session ‘Brown Dwarf Modelling’ , Session Lead
2021 – 2022	ESA Research Fellowship Hiring Committee , Reviewer
2020 – 2021	Chair of Scientific & Local Organizing Committee: STScI Symposium 2021, ‘Towards the comprehensive characterization of exoplanets: Science at the Interface of Multiple Measurement Techniques’
2020 – 2021	ESA Distinguished Visitor Committee , Reviewer
2020	13th ESA Space Science Workshop , Session Chair
2020	NCCR PlanetS General Assembly VI , Session Chair
2019	Extreme Precision in Radial Velocity IV , Local Organizing Committee
2017	NCCR PlanetS Junior Researchers’ Assembly (JURA) , Scientific & Local Organizing Committee

TECHNICAL SKILLS

Advanced: Python, astropy, matplotlib, pandas, L^AT_EX, macOS, Linux, bash, Keynote, Microsoft Word/Excel/Powerpoint
Beginner/Intermediate: Github, JIRA, SQL, C, IDL, Fortran, Mathematica

TELESCOPE EXPERIENCE

Coronagraphic Imaging | High Resolution Spectroscopy | Integral Field Spectroscopy | Interferometry | Broad Band Imaging

31 nights	EULER-1.2m, CORALIE and EulerCAM , La Silla Observatory, Chile (Program Coordinator)
52 hours	VLT-8.2m, SPHERE , Paranal Observatory, Chile (Principal Investigator)
22 nights	VLT-8.2m, NaCo , Paranal Observatory, Chile (Observer as GTO Science Team Member)
4 nights	VLT-8.2m, GRAVITY , Paranal Observatory, Chile (Observer as GTO Science Team Member)
1 night	ANU-2.3m, WiFeS , Sliding Spring Observatory, Australia

AWARDED TELESCOPE TIME

Principal Investigator

ESO, P108 VLT/GRAVITY [3 hours]

“Towards complete characterisation of the benchmark brown dwarf HD 13724 B”

ESO, P105 VLT/SPHERE [12 hours] (Re-assigned to P107/P108 due to COVID-19)

“Direct Imaging and Spectral Characterisation of Ultra-Cool companions to Solar type stars.”

ESO, P104 VLT/SPHERE [12 hours]

“Atmospheric characterisation and orbital monitoring of two brown dwarf companions from radial velocity surveys.”

ESO, P104 VLT/SPHERE [10 hours]

“Direct Imaging and Spectral Characterisation of Ultra-Cool companions to Solar type stars.”

ESO, P103 VLT/SPHERE [9 hours]

“Direct Imaging and Spectral Characterisation of Ultra-Cool companions to Solar type stars.”

ESO, P102 VLT/SPHERE [6 hours]

“Direct Imaging and Spectral Characterisation of Ultra-Cool companions to Solar type stars.”

Co-Investigator

Keck 2022B, MOSFIRE [0.5 nights]

“Cloud structure of a T-Y transition Brown Dwarf”

ESA, CHEOPS Cycle 3 [30 orbits]

“Understanding the formation and evolution of TESS and ASTEP confirmed sub-Neptunes”

ESO, P109 VLT-AT/GRAVITY [46 hours]

“Uncovering the Dynamical History of Brown Dwarf Companions”

ESO, P107 VLT/SPHERE [2 hours]

“Narrowing down orbital predictions of the exoplanet 51 Eridani b for GRAVITY follow-up”

JWST Cycle 1, NIRSpec/IFU Spectroscopy & MIRI/LRS [5.2 hours]

“Direct Imaging Spectroscopy of two Jovian Exoplanets: Characterization of the TYC 8998-760-1 Multi-Planetary System”

Subaru/REACH [2.5 nights]

“Search for C/O tracers by the first high-dispersion coronagraphy”

Subaru/REACH [3 nights]

“Search for C/O tracers by the first high-dispersion coronagraphy”

ESO, P101-P104 VLT/NACO [56 nights]

Large Program: *“NaCo Imaging Survey for Planets around Young stars (NaCo - ISPY).”*

ESO, P101 VLT/SPHERE [6 hours]

“Atmospheric Characterization and Orbital Monitoring of a Cold Substellar Companion.”

ESO, P101 VLT/SPHERE [3 hours]

“Confirmation of two brown dwarfs around the Herbig Ae/Be star HD 101412”

ESO, P100 VLT/NACO [4 hours]

“Confirming a directly imaged gas giant planet candidate at 2.6 AU from its nearby host star”

ESO, P99-P100 VLT/NACO [28 nights]

Large Program: *“NaCo Imaging Survey for Planets around Young stars (NaCo - ISPY).”*

ESO, P98 VLT/NACO [14 nights]

“NaCo Imaging Survey for Planets around Young stars (NaCo - ISPY).”

ADDITIONAL TRAINING

2022	Introduction to Data Science course , Space Telescope Science Institute, online
2022	NASA Exoplanet Science Institute Summer Workshop: Exoplanet Science in the Gaia Era , online
2021	Advanced Git training course , Space Telescope Science Institute, online
2021	Introductory Git training course , Space Telescope Science Institute, online
2021	JWebbinar: “Pipeline Information and Data Products” , Space Telescope Science Institute, online
2021	NASA Exoplanet Science Institute Summer Workshop: Circumstellar Disks & Young Planets , online
2020	NASA Exoplanet Science Institute Summer Workshop: Extreme Precision Radial Velocity , online
2018	PyData Workshop , London, UK
2018	Exoplanets in Binary Stars Workshop , Bern, Switzerland
2018	Penn State Astrostatistics Summer School , State College, USA
2017	CADMOS High Performance Computing Course , Château d’Ex, Switzerland

AWARDS AND GRANTS

2022	Emerging Researchers in Exoplanetary Science , The Heising-Simons Foundation, USA (~1,500 USD)
2022	NASA Exoplanet Program Analysis Group Meeting travel funding , NASA/JPL, USA (~3,000 USD)
2022	Exoplanet Summer Program Funding, Other Worlds Laboratory , UC Santa Cruz, USA (~3,000 USD)
2021	Outstanding Achievement Award , The Sutton Trust, University of Cambridge, UK (100 GBP)
2021	IAU Junior Member of the Month , International Astronomical Union
2020	European Space Agency Postdoctoral Fellowship , Space Telescope Science Institute, USA
2019	National Center of Competence in Research Switzerland ‘Planets’ Grant , Switzerland (800 CHF)
2019	Women in Space Grant , Arizona State University, Phoenix, USA (660 USD)
2018	National Center of Competence in Research Switzerland ‘Planets’ Grant , Switzerland (1,000 CHF)
2018	PyData Scholarship , London, UK (180 GBP)
2016	Sheffield Graduate Award , University of Sheffield, UK
2015	Sheffield Undergraduate Research Experience Grant , University of Sheffield, UK (1,500 GBP)
2016	QS Impact Award - nominated for research undertaken at ANU, Australia
2011	Selected participant for UNIQ , Oxford University, UK
2011	Selected participant for Sutton Trust , University of Cambridge, UK

INVITED COLLOQUIA, SEMINARS AND TALKS

Upcoming	Invited seminar , Carnegie Earth & Planets Laboratory, Washington DC, USA
2022	Invited seminar , European Southern Observatory, Santiago, Chile
2022	Invited seminar , University of Michigan, Ann Arbor, USA
2022	Invited talk , Other Worlds Laboratory, UC Santa Cruz, USA
2022	Invited talk , NASA Exoplanet Program Analysis Group Meeting, Pasadena, USA
2022	Invited seminar , STScI Discovery Seminar Series, USA, online
2021	Invited colloquium , Florida Institute of Technology, USA, online
2021	Invited lecture , European Southern Observatory, Germany, online
2021	Invited colloquium , Center for Space and Habitability, University of Bern, Switzerland, online
2021	Invited seminar , JILA - University of Colorado Boulder, USA, online
2021	Invited talk , NASA Goddard Space Flight Center, USA, online
2020	Invited seminar , European Space Agency Science Seminar Series, Spain, online
2020	Invited talk , Space Telescope Science Institute Colloquium, USA, online
2020	Invited talk , European Space Astronomy Centre, Spain
2019	Invited talk , University of Sheffield, UK
2019	Invited seminar , Lancaster University, UK
2019	Invited talk , NCCR PlanetS General Assembly V, Beatenberg, Switzerland
2018	Invited talk , NACO-ISPY Science Team Meeting, ETH Zürich, Switzerland
2018	Invited talk , NCCR PlanetS General Assembly IV, Grindelwald, Switzerland
2017	Invited talk , NACO-ISPY Science Team Meeting, MPIA, Heidelberg, Germany

RESEARCH COLLABORATIONS

Since 2021	JWST/NIRSpec Science Readiness Team , Team Member
Since 2021	JWST Telescope Scientist Team , Project-Level Member – Coronagraphic Imaging
Since 2021	JWST High Contrast Imaging Early Release Science Program , Spectroscopy Theme Co-Lead & Science Team Member
Since 2021	LIFE Space Mission concept , Science Team Member
Since 2020	ExoGRAVITY Consortium , Science Team Member
Since 2020	STScI Extrasolar Planetary Systems Imaging Group , Group Member
Since 2016	NACO-ISPY Consortium , Science Team Member and Collaborator
2016 – 2020	CORALIE Survey Team , Program Coordinator
2016 – 2020	SPHERE-SHINE Consortium , Science Team Member

PROFESSIONAL MEMBERSHIPS

International Astronomical Union
American Astronomical Society
Europlanet Society
Royal Astronomical Society
Institute of Physics
European Astronomical Society
Women in Astronomy Forum, STScI
Space Generation Advisory Council
UK Students for the Exploration and Development of Space
Women in Aerospace Society – Europe

OUTREACH AND DEI ACTIVITIES

2022 **Invited Speaker**, The Boardroom Masterclasses, University of Sheffield, UK
2022 **Invited Speaker**, NASA Subject Matter Expert for JWST, Space Talks, Liberty Science Center, USA
2022 **Invited Panelist**, Space Panel, Women in Science & Engineering Conference, University of Toronto, Canada
2022 **Invited Speaker**, Astronomical Society, Ohio State University, USA
2022 **Invited Speaker**, Inspirational Speaker Series, Sheffield Insights, University of Sheffield, UK
2022 **Invited Panelist**, Insight into STEM Careers, The Sutton Trust, UK
2022 **Invited Speaker**, Youth for Astronomy & Engineering Forum, Space Telescope Science Institute, USA
2022 **Invited Speaker**, Outreach talk at Oriel High School, UK
2021 **Invited Subject Matter Expert for NASA JWST Events**, McWane Science Center, USA
2021 **Lecturer, STScI Public Lecture Series**, Space Telescope Science Institute (>30K YouTube views)
2022 **Social Media and Communications Team Member**, Women in Aerospace Society Europe
Since 2021 **Caroline Herschel Visitor Program**, Space Telescope Science Institute, Committee Member
Since 2020 **@LGBTQIAinAstro Twitter Account**, Founder and Curator
Since 2019 **“The Female Scientist” Magazine**, Author
2021 **“A Scientist Just Like Me”**, Primary Science Teaching Trust UK, Invited Featured Scientist
2020 **Wow! Signal Episode 2: Aliens**, Adler Planetarium, Featured Scientist
2020 **“I’m a scientist” Physics Zone**, UK Research and Innovation, Featured Scientist
2018 **Gender Summit Europe**, Participant
2017 – 2020 **Diversity in Science Committee**, Geneva Observatory, Co-Founder and Member
2017 **Impact Hub Gender Hackathon: Girls in Technology**, Project Lead
2016 – 2020 **Geneva Observatory Tour Guide**
2016 – 2020 **NCCR PlanetS**, Member
2015 **Australian National University Astronomy Society**, Secretary and Member
2014 – 2015 **Australian National University Physics Society**, Secretary and Member
2013 – 2016 **Student Ambassador for Learning and Teaching**, University of Sheffield
2013 – 2014 **University of Sheffield Mentor**
2012 – 2016 **STEMNET Ambassador**
2012 – 2016 **University of Sheffield Physics Society**, Member

SELECTED MEDIA APPEARANCES AND PRESS RELEASES

Quanta Magazine	“Webb Space Telescope Snaps Its First Photo of an Exoplanet”, 2022
Scientific American	“Scientists Plan Private Mission to Hunt for Earths around Alpha Centauri”, 2021
Scientific American	“Astronomers May Have Captured the First Ever Image of Nearby Exoplanet Proxima C”, 2020
Forbes	“At Last, Scientists Have Found The Galaxy’s Missing Exoplanets: Cold Gas Giants”, 2019
Astronomy Now	“Five long-period exoplanets found after 20 years of observation”, 2019
CNRS	“SPHERE-SHINE: Celebrating Two Decades Of Sphere Challenges And Achievements”, 2021
Aerospace For All	Podcast: “How are exoplanets actually discovered?”, 2020
AccuWeather	“We’re not invisible people’: Meet these 6 LGBTQ scientists who are changing the world”, 2021
All About Space	Magazine Feature: “Ask an expert: How does the interstellar medium help form stars?”, 2021
Berthine	“Gender inequalities in astronomy: A discussion with astrophysicist Emily Rickman”, 2020
UN ITU News	“‘Gender equality hackathon’ in Geneva pools fresh ideas to bridge digital divide”, 2017
Twitter curator	@People_of_Space, @astrotweeps, @RealScientists, @ResearchHersCode, @LGBTQIAinAstro
Profile features & interviews	<i>The Female Scientist</i> (@ScientistFemale), <i>Women Doing Science</i> (@WomenDoingSci), <i>Women of Aeronautics & Astronautics</i> (@woaaofficial), <i>1 Million Women in STEM</i> (@MillionStem), <i>The Sutton Trust Alumni Stories</i> (@SuttonTrust), <i>The University of Sheffield Alumni Highlights</i> (@Physic-sShef), <i>Faces of the Australian National University</i> (@FacesofANU)

PUBLICATION LIST

34 total refereed publications; *H*-index = 15; 630+ total citations (NASA/ADS)

First-author:

4. **E. L. Rickman**, D. Ségransan, M. Marmier et al. “*The CORALIE survey for southern extrasolar planets XVIII: Three new massive planets and two low-mass brown dwarfs at greater than 5 AU separation*”, A&A 625, A71 (2019)
3. **E. L. Rickman**, D. Ségransan, J. Hagelberg et al. “*Spectral and atmospheric characterisation of a new benchmark brown dwarf HD 13724 B*”, A&A, 635, A203 (2020)
2. **E. L. Rickman**, E. Matthews, W. Ceva et al. “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 Accelerations*”, accepted to A&A, in press (2022)
1. **E. L. Rickman** et al. “*The discovery of two new benchmark brown dwarfs with precise dynamical masses at the stellar-substellar boundary*”, in preparation

Co-author:

40. S. Hinkley, S. Lacour, G.-D. Marleau et al., including **E. L. Rickman**, “*Direct Discovery of the Inner Exoplanet in the HD206893 System. Evidence for Deuterium Burning in a Planetary Mass Companion?*”, accepted to A&A, in press (2022)
39. A. J. Bohn, C. Ginski, M. A. Kenworthy et al., including **E. L. Rickman**, “*Unveiling wide-orbit companions to K-type stars in Sco-Cen with Gaia EDR3*”, A&A, 657, A53, (2022)
38. N. Godoy, J. Olofsson, A. Bayo et al., including **E. L. Rickman**, “*ISPY - NaCo Imaging Survey for Planets around Young stars. CenteR: the impact of centering and frame selection*”, A&A, 663, A53, (2022)
37. M. Bonavita, R. Gratton, S. Desidera et al., including **E. L. Rickman**, “*New binaries from the SHINE Survey*”, A&A, 663, A144 (2022)
36. S. Hinkley, A. Carter, A. Skemer et al., including **E. L. Rickman**, “*The JWST Early Release Science Program for the Direct Imaging and Spectroscopy of Exoplanetary Systems*”, PASP, Volume 134, Issue 1039 (2022)
35. D. Mesa, M. Bonavita, S. Benatti et al., including **E. L. Rickman**, “*Constraining the presence of planetary mass companions around five young stars using direct imaging, radial velocity and astrometric data*”, A&A, 665, A73 (2022)
34. A. Zurlo, K. Goździewski, C. Lazzoni et al., including **E. L. Rickman**, “*Orbital and dynamical analysis of the system around HR 8799. New VLT/SPHERE and LBT/LUCI astrometrical measurement*”, A&A, 666, A133 (2022)
33. A. L. Carter; B. A. Biller; J. H. Girard; et al., including **E. Rickman**, “*JWST Early Release Science: High Contrast Imaging of the Exoplanet HIP 65426 b from 2–16 μm* ”, submitted to AAS Journals
32. B. E. Miles; B. A. Biller; P. Patapis; K. Worthen; **E. Rickman** et al. “*The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems II: A 1 to 20 Micron Spectrum of the Planetary-Mass Companion VHS 1256-1257 b*”, submitted to AAS Journals
31. R. Gratton, V. D’Orazi, T. A. Pacheco et al., including **E. L. Rickman**, “*Investigating Sirius-like systems with SPHERE*”, A&A, 646, A61 (2021)
30. D. Mesa, S. Marino, M. Bonavita et al., including **E. L. Rickman**, “*Limits on the presence of planets in systems with debris disks: HD 92945 and HD 107146*”, MNRAS, Volume 503, Issue 1 (2021)
29. A. Vigan, C. Fontanive, M. Meyer et al., including **E. L. Rickman**, “*The SPHERE infrared survey for exoplanets (SHINE) III. The demographics of young giant exoplanets below 300 AU with SPHERE*”, A&A 651, A72 (2021)
28. M. Langlois, R. Gratton, A.-M. Lagrange et al., including **E. L. Rickman**, “*The SPHERE infrared survey for exoplanets (SHINE). II. Observations, Data reduction and analysis, Detection performances and early-results*”, A&A 651, A71 (2021)
27. R. Asensio-Torres, T. Henning, F. Cantalloube et al., including **E. L. Rickman**, “*Perturbbers: SPHERE detection limits to planetary-mass companions in protoplanetary disks*”, A&A 652, A101 (2021)
26. S. Desidera, G. Chauvin, M. Bonavita et al., including **E. L. Rickman**, “*The SPHERE infrared survey for exoplanets (SHINE)- I Sample definition and target characterization*”, A&A 651, A70 (2021)
25. G. Singh, T. Bhowmik, A. Boccaletti et al., including **E. L. Rickman**, “*Revealing asymmetrical dust distribution in the inner regions of HD 141569*”, A&A 653, A79 (2021)
24. A.-L. Maire, M. Langlois, P. Delorme et al., including **E. L. Rickman**, “*Lessons learned from SPHERE for the astrometric strategy of the next-generation of exoplanet imaging instruments*”, JATIS, Volume 7 (2021)
23. S. B. Brown-Sevilla, M. Keppler, M. Barraza-Alfraro et al., including **E. L. Rickman**, “*A multi-wavelength analysis of the spiral arms in the protoplanetary disk around WaOph 6*”, A&A, 654, A35 (2021)

22. S. Lacour, J. J. Wang, L. Rodet et al., including **E. L. Rickman**, “*The mass of β Pictoris c from β Pictoris b orbital motion*”, A&A, 654, L2 (2021)
21. S. Hunziker, H.M. Schmid, D. Mouillet et al., including **E. L. Rickman**, *RefPlanets: Search for reflected light from extra-solar planets with SPHERE / ZIMPOL*, A&A 634, A69 (2020)
20. N. Engler, C. Lazzoni, R. Gratton et al., including **E. L. Rickman**, “*HD 117214 debris disk: scattered light images and constraints on the presence of planets*”, A&A 635, A19 (2020)
19. R. Launhardt, T. Henning, A. Quirrenbach et al., including **E. L. Rickman**, “*ISPY - the NaCo Imaging Survey for Planets around Young stars: I. Survey description and results from the first 2.5 years of observations*”, A&A, 635, A162 (2020)
18. R. Gratton, A. Zurlo, H. Le Coroller et al., including **E. L. Rickman**, “*Searching for the near-infrared counterpart of Proxima c using multi-epoch high-contrast SPHERE data at VLT*”, A&A 638, A120 (2020)
17. A.-L. Maire, K. Molaverdikhani, S. Desidera et al., including **E. L. Rickman**, “*Orbital and spectral characterization of the benchmark T-type brown dwarf HD 19467 B*”, A&A 639, A47 (2020)
16. S. M. Caballero-Nieves, D. R. Gies, E. K. Baines et al., including **E. L. Rickman**, “*A High Angular Resolution Survey of Massive Stars in Cygnus OB2: JHK Adaptive Optics Results from the Gemini Near-InfraRed Imager*”, AJ, Vol 160, Issue 3, 115 (2020)
15. C. Lazzoni, A. Zurlo, S. Desidera et al., including **E. L. Rickman**, “*The search for disks or planetary objects around directly imaged companions: A candidate around DH Tau B’*”, A&A 641, A131 (2020)
14. M. Kasper, K. K. R. Santhakumari, T. M. Herbst et al., including **E. L. Rickman**, “*A triple star in disarray. Multi-epoch observations of T Tauri with VLT-SPHERE and LBT-LUCI*”, A&A, 644, A114 (2020)
13. A. C. Cheetham, M. Samland, S. S. Brems et al., including **E. L. Rickman**, “*Spectral and orbital characterisation of the directly imaged giant planet HIP 65426 b*”, A&A 622, A80 (2019)
12. D. Mesa, M. Bonnefoy, R. Gratton et al., including **E. L. Rickman**, “*Exploring the R CrA environment with SPHERE: Discovery of a new stellar companion*”, A&A 624, A4 (2019)
11. G. Cugno, S.P. Quanz, R. Launhardt et al., including **E. L. Rickman**, “*ISPY - the NACO Imaging Survey for Planets around Young stars: A young companion candidate embedded in the R CrA cloud*”, A&A 624, A29 (2019)
10. A.-L. Maire, L. Rodet, F. Cantalloube et al., including **E. L. Rickman**, “*Hint for curvature in the orbital motion of the exoplanet 51 Eridani b using 3 years of VLT/SPHERE monitoring*”, A&A 624, A118 (2019)
9. A. Boccaletti, P. Thébault, N. Pawellek et al., including **E. L. Rickman**, “*Two cold belts in the debris disk around the G-type star NZ Lup*”, A&A 625, A21 (2019)
8. A. Musso Barucci, R. Launhardt, G. M. Kennedy et al., including **E. L. Rickman**, “*ISPY - the NaCo Imaging Survey for Planets around Young stars: Discovery of an M dwarf inside the gap between HD 193571 and its ring*”, A&A 627, A77 (2019)
7. D. Mesa, M. Langlois, A. Garufi et al., including **E. L. Rickman**, “*Determining mass limits around HD 163296 through SPHERE direct imaging data*”, MNRAS, Volume 488, Issue 1 (2019)
6. A. Garufi, L. Podio, F. Bacciotti et al., including **E. L. Rickman**, “*The SPHERE view of the jet and the envelope of RY Tau*”, A&A 628, A68 (2019)
5. E. Rigliaco, R. Gratton, D. Mesa et al., including **E. L. Rickman**, “*Investigating the nature of the extended structure around the Herbig star RCrA using integral field and high-resolution spectroscopy*”, A&A 632, A18 (2019)
4. D. Mesa, M. Keppler, F. Cantalloube et al., including **E. L. Rickman**, “*VLT/SPHERE exploration of the young multiplanetary system PDS70*”, A&A 632, A25 (2019)
3. M. Raimbault, D. Ségransan, S. Udry et al., including **E. L. Rickman**, “*The CORALIE survey for southern extrasolar planets XX. Nine new giant planets at various separation up to 6 AU. Update of four known planetary systems*”, submitted to A&A
2. J. Aguilar, L. Pueyo, R. Nilsson et al., including **E. L. Rickman**, “*Discovery of a low-mass stellar companion to 102 Aqr using high-contrast imaging*”, in preparation
1. G. Cugno, R. Launhardt, T. D. Pearce et al., including **E. L. Rickman**, “*ISPY-NACO Imaging Survey for Planets around Young stars. The demographics of forming planets embedded in protoplanetary disks*”, submitted to A&A

Other publications:

6. **E. L. Rickman**, “*STScI’s 2021 Symposium: Toward the Comprehensive Characterization of Exoplanets: Science at the Interface of Multiple Measurement Techniques*”, STScI Newsletters, Volume 38 Issue 02 (2021)
5. Rigby, Jane; Perrin, Marshall; McElwain, Michael; et al., including **E. L. Rickman**, “*Characterization of JWST science performance from commissioning*”, STScI Technical Document for JWST (2022)

4. Hinkley, Sasha; Carter, Aarynn L.; Ray, Shrishmoy et al., including **Emily Rickman**, “*Direct imaging and spectroscopy of exoplanetary systems with the JWST early release science program*”, Proceedings of the SPIE, Volume 12180 (2022)
3. H. M. J. Boffin, E. Alei, N. Casasayas Barris et al., including **E. L. Rickman**, “*Report on the ESO workshop: Atmospheres, Atmospheres! Do I look like I care about atmospheres?*”, The ESO Messenger, vol. 186, p. 32-36 (2022)
2. A.-L. Maire, G. Chauvin, A. Vigan et al., including **E. L. Rickman**, “*High-precision astrometric studies in direct imaging with SPHERE*”, The ESO Messenger, vol. 183, p. 7-12 (2021)
1. A. Nota, A. Aloisi, S. Hernandez et al., including **E. L. Rickman**, “*The Women in Astronomy Forum at STScI: Affecting Change in the Local and Global Astronomical Communities*”, STScI Newsletters, Volume 37 Issue 02 (2020)

CONFERENCE PRESENTATIONS

27. **E. L. Rickman**. Contributed Talk: “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 accelerations*”. Exoplanets IV Conference (2022), Las Vegas, USA.
26. **E. L. Rickman**. Contributed Talk: “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 accelerations*”. Emerging Researchers in Exoplanet Science VII Symposium (2022), Penn State, USA.
25. **E. L. Rickman**. Contributed Talk: “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 accelerations*”. 240th American Astronomical Society Meeting (2022), Pasadena, USA.
24. **E. L. Rickman**. Contributed Talk: “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 accelerations*”. Spirit of Lyot Conference (2022), Leiden, The Netherlands.
23. **E. L. Rickman**. Contributed Talk: “*Precise dynamical masses of new directly imaged companions from combining relative astrometry, radial velocities, and Hipparcos-Gaia eDR3 accelerations*”. Bay Area Exoplanet Meeting 41 (2022), Santa Cruz, USA.
22. **E. L. Rickman**. Contributed Talk: “*Preparing for the future of direct imaging exoplanets*”. IR2022: An Infrared Bright Future for Ground-based IR Observatories in the Era of JWST (2022), online.
21. **E. L. Rickman**. Invited Lecture: “*Obtaining Spectra from Direct Imaging Observations*”, European Southern Observatory Exoplanet Atmospheres Workshop (2021), online.
20. **E. L. Rickman**. Contributed Talk: “*Preparing for the future of direct imaging exoplanets through combining other exoplanet detection techniques*”. Europlanet Society Congress (2021), online.
19. **E. L. Rickman**. Contributed Talk: “*Preparing for the future of direct imaging*”. European Astronomical Society Annual Meeting (2021), online.
18. **E. L. Rickman**. Poster: “*Deriving the most precise dynamical masses of brown dwarfs & low mass stars*”. European Space Agency Young Professionals Event (2021), online.
17. **E. L. Rickman**. Poster & short talk: “*Direct imaging and spectral characterisation of benchmark brown dwarfs*”. The 20.5th Cambridge Workshop on Cool Stars, Stellar Systems, and the Sun (2021), online.
16. **E. L. Rickman**. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. The 13th European Space Agency Space Science Workshop (2020), online.
15. **E. L. Rickman**. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. Chesapeake Bay Area Exoplanet Meeting (2020), online.
14. **E. L. Rickman**. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. Bay Area Exoplanet Meeting (2020), online.
13. **E. L. Rickman**. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. Physikerinnentagung, Universität Hamburg (2020), online.
12. **E. L. Rickman**. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. NASA Exoplanet Science Institute Exoplanets Demographics Conference (2020), online.
11. **E. L. Rickman**. Dissertation Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. 236th American Astronomical Society Meeting (2020), online.
10. **E. L. Rickman**, D. Ségransan, A. Cheetham. Contributed Talk: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. European Space Agency JWST Workshop (2020), online.
9. **E. L. Rickman**, D. Ségransan, A. Cheetham. Poster: “*Direct imaging and spectral characterisation of long period exoplanets and brown dwarfs*”. Exoplanets III Conference (2020), online.

8. **E. L. Rickman**, D. Ségransan, A. Cheetham. Poster: “*Spectral and atmospheric characterisation of a new benchmark brown dwarf*”. American Astronomical Society, Extreme Solar Systems 4 (2019), Reykjavik, Iceland.
7. **E. L. Rickman** & D. Ségransan. Contributed Talk: “*Investigating giant planet formation through the detection and characterisation of these sub-stellar companions*”. Women in Space Conference (2019), Phoenix, USA.
6. **E. L. Rickman**, D. Ségransan, A. Cheetham. Invited Talk: “*Direct imaging and spectral characterisation of a new benchmark brown dwarf*”. NCCR PlanetS General Assembly V (2019), Beatenberg, Switzerland.
5. **E. L. Rickman**, D. Ségransan, A. Cheetham. Invited Talk: “*NACO-ISPY: An Imaging Survey for Planets around Young Stars*”. NCCR PlanetS General Assembly IV (2018), Grindelwald, Switzerland.
4. **E. L. Rickman**. Invited Talk: “*Report on the 1st NCCR Junior Researchers’ Assembly (JURA)*”. NCCR PlanetS General Assembly IV (2018), Grindelwald, Switzerland.
3. **E. L. Rickman**, D. Ségransan, A. Cheetham. Poster: “*Understanding the puzzling nature of the ultracool brown dwarf HD 4113 C*”, Exoplanets II Conference (2018), Cambridge, UK.
2. **E. L. Rickman**, D. Ségransan, A. Cheetham. Poster: “*Investigating giant planet and brown dwarf formation and evolution through the detection and characterisation of these sub-stellar companions*”. The 20th Cambridge Workshop on Cool Stars, Stellar Systems and the Sun (2018), Boston, USA.
1. **E. L. Rickman** & D. Ségransan. Contributed Talk: “*Direct Imaging: The Next Wave of Exoplanetary Science*”. The 1st Swiss Junior Researchers’ Assembly (2017), Sainte-Croix, Switzerland.