

# Aki Roberge

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Exoplanets & Stellar Astrophysics Lab.  
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**RESEARCH INTERESTS :** Study of planet formation through multi-band observations of young circumstellar disks; planning and development for future exoplanet observations

## EDUCATION

The Johns Hopkins University, Baltimore, MD

Ph.D. in Astrophysics 2002

Thesis title: "Ultraviolet Spectroscopy of Circumstellar Disks,"

M.A. in Physics 1999

Massachusetts Institute of Technology, Cambridge, MA

B.S. in Physics w/ Planetary Science minor 1996

## PROFESSIONAL APPOINTMENTS

Research Astrophysicist 2008 – present

NASA Goddard Space Flight Center, Exoplanets & Stellar Astrophysics Lab.

Far-UV to far-IR observations of gas/dust in protoplanetary & debris disks; Development of future space telescope mission concepts

NASA Postdoctoral Program Research Associate 2005 – 2008

NASA Goddard Space Flight Center, Exoplanets & Stellar Astrophysics Lab.

Far-UV spectroscopy of atomic gas in debris disks; Mid- to far-IR survey for new debris disks with gas and dust; Development of future space telescope mission concepts

Carnegie Postdoctoral Research Fellow 2002 – 2005

Carnegie Institution of Washington, Dept. of Terrestrial Magnetism

Far-UV spectroscopy of molecular gas in debris disks; Spatially resolved optical spectroscopy and coronagraphic imaging of a protoplanetary disk

Graduate Research Assistant 1997 – 2002

The Johns Hopkins University, Dept. of Physics & Astronomy

Far-UV spectroscopy of gas and star-grazing planetesimals in protoplanetary and debris disks; Study of stellar activity in early-type stars

## SELECTED AWARDS

GSFC Special Act Award for "Exceptional Outreach to Minority Serving Institutions" 2015

Robert H. Goddard Award for Science 2014

NASA Goddard Space Flight Center Peer Award 2010

**SELECTED AWARDED PROJECTS**

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|--|-------------|
| NASA WFIRST Science Investigation Team<br>Deputy PI for Coronagraph SIT Team (PI: M. Turnbull)   | 2015 – 2020 |
| NASA Nexus for Exoplanet System Science<br>Co-I on <a href="#">“Rocky Planet Habitability: Insights from Solar System Climate Dynamics Through Time”</a> project (PI: A. Del Genio)            | 2015 – 2019 |
| NASA Astrobiology Institute<br>Co-I on <a href="#">Goddard Center for Astrobiology</a> project<br>“Origin and Evolution of Organics in Planetary Systems” (PI: M. Mumma)                       | 2008 – 2019 |
| NASA Research Opportunities in Space and Earth Sciences (ROSES)<br>Co-I on SOFIA Third Generation Science Instrument “The High Resolution Mid-Infrared Spectrometer (HIRMES)” (PI: S. Mosley)  | 2015 – 2018 |
| Co-I on APRA project “Development and Flight-testing of Technology for Future NASA Astrophysics Missions” (PI: K. France)  | 2015 – 2018 |
| PI on Origins of Solar Systems project “Finding the Needle in the Haystack: Realistic Simulations of ExoEarth Observations in the Presence of Exozodiacal Dust”                                | 2009 – 2012 |
| Large Binocular Telescope Interferometer<br>Collaborator on <a href="#">NASA Key Science Team</a> proposal (PI: A. Weinberger)<br>“Signal <i>and</i> Noise: Debris Disks and Exozodiacal Dust” | 2012 – 2017 |
| Atacama Large Millimeter Array<br>PI on Cycle 3 program “The Mysterious Gas in the 49 Ceti Debris Disk”  | 2015        |
| NASA/ESA <i>Hubble Space Telescope</i><br>PI on Cycle 23 program “Inventing Gas in Debris Disks: UV Spectroscopy of Eta Tel”   | 2015        |
| PI on Cycle 20 program “An Inventory of Gas in a Debris Disk: Far-UV Spectroscopy of 49 Ceti”  | 2012        |
| PI on Cycle 17 program “Coronagraphic Imaging of Debris Disks Containing Gas”  | 2008        |
| ESA <i>Herschel Space Observatory</i><br>Co-I on Open Time Key Programmes “Gas in Protoplanetary Systems” (GASPS; PI: W. Dent) & “Dust Around Nearby Stars” (DUNES; PI: C. Eiroa)              | 2009 – 2013 |
| PI on Open Time 2 program “Ultra-Cold Material in Young Debris Disks”  | 2012        |

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| NASA Astrophysics Strategic Mission Concept Studies   | 2008        |
| Co-I on <i>New Worlds Observer</i> telescope + free-flying occulter mission study (PI: W. Cash)   |             |
| Co-I on <i>Star Formation Observatory</i> optical/UV instrument study (PI: P. Scowen)   |             |
| NASA <i>Spitzer Space Telescope</i>   |             |
| PI on Cycle 2 program “Determining the Disk Fraction Among Shell Stars: A Survey for CS Disks with Gas and Dust”  | 2005        |
| NASA Origins Science Mission Concept Study  | 2004        |
| Co-I on <i>HORUS</i> UV/optical telescope mission study (PI: J. Morse)  |             |
| NASA/CNES/CSA <i>Far Ultraviolet Spectroscopic Explorer</i>   |             |
| PI on Cycle 4 program “Circumstellar Gas in Young Planetary Debris Disks”   | 2003        |
| <b>OTHER OBSERVING EXPERIENCE</b>   |             |
| Magellan Telescopes, Las Campanas, Chile  | 2002 – 2008 |
| PI of two projects involving near-IR imaging of H <sub>2</sub> around CS disk stars and in the R CrA star-forming region; Co-I on an optical spectroscopic survey of CS gas around nearby shell stars; Co-I on a mid-IR photometric survey for CS disks and a near-IR survey for Herbig-Haro jets from protostars |             |
| W. M. Keck Telescopes, Mauna Kea, Hawaii  | 2003        |
| Co-I on a mid-IR photometric survey for CS disks  |             |
| <b>SELECTED OTHER PROFESSIONAL ACTIVITIES</b>   |             |
| Study Scientist, NASA <a href="#">LUVOIR Decadal Large Mission Study</a>  | 2016 – 2019 |
| WFIRST Formulation Science Working Group member   | 2015 – 2020 |
| Study Science Team member, WFIRST mission   | 2014 – 2015 |
| Member, NASA Exoplanet Probe Science and Technology Definition Team, <a href="#">External Occulter (Exo-S) STDT</a>   | 2013 – 2015 |
| Science Team associate member, <i>Far Ultraviolet Spectroscopic Explorer</i> , Circumstellar Disks Group  | 2001 – 2007 |
| <b>SELECTED SERVICE</b>   |             |
| Co-organizer, NASA GSFC / Howard University Interaction Days  | 2014 – 2017 |
| Executive Committee member, NASA Exoplanets Exploration Program Analysis Group ( <a href="#">ExoPAG</a> )   | 2009 – 2013 |

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| Member, <a href="#">NASA Astrophysics Visionary Roadmap Team</a>  | 2013        |
| Science Vision Team member, NASA GSFC   | 2011        |
| Science Director's Council member, NASA GSFC  | 2009 – 2011 |
| Extrasolar Planets Seminar co-organizer, NASA GSFC  | 2006 – 2011 |
| NASA Goddard Association of Postdoctoral Scholars vice-president /<br>civil servant advisor   | 2009 – 2010 |
| <i>Multimission Archive at Space Telescope (MAST)</i> Users Group advisory<br>committee member  | 2003 – 2006 |
| Scientific organizing committee member  |             |
| “Habitable Worlds 2017: A System Science Workshop”, Laramie WY  | Nov. 2017   |
| “Exoclipse Conference”, Boise ID  | Aug. 2017   |
| “High-Contrast Imaging in Space Workshop”, Baltimore MD   | Nov. 2016   |
| “Space Telescopes and Instrumentation: Optical, Infrared, and Millimeter Wave”,<br>SPIE Astronomical Telescopes + Instrumentation Conference, Edinburgh, Scotland   | June 2016   |
| AAS Division for Planetary Science Annual Meeting, Washington DC  | Nov. 2015   |
| “Exploring the Universe with JWST Conference”, Noordwijk, Netherlands   | Oct. 2015   |
| “Physics of Planetary Atmospheres: From Earth to Exoplanets,” AGU<br>Chapman Conference, Annapolis MD   | June 2013   |
| “Enhancing the Legacy of HST Spectroscopy Workshop”, Baltimore MD   | Nov. 2012   |
| “From Atoms to Pebbles: Herschel’s View of Star and Planet Formation<br>Symposium”, Grenoble, France  | Mar. 2012   |
| “Far-IR Astronomy from Space: A Community Workshop about the Future,”<br>Pasadena CA  | May 2008    |
| Proposal review panel member or chair: NASA ROSES Exoplanets, NASA ROSES Origins of<br>Solar Systems, NASA Exoplanet Technology Development (APRA & TDEM), NSF Astron-<br>omy, NASA <i>Hubble Space Telescope</i> , W. M. Keck Observatory (NASA time), ESA ALMA<br>Observatory |             |
| External proposal reviewer: French Agence Nationale de la Recherche, Canadian Space Agency,<br>Netherlands Organization for Scientific Research   |             |
| Referee for <i>The Astronomical Journal</i> , <i>The Astrophysical Journal</i> , <i>The Astrophysical Journal Let-<br/>ters</i> , <i>Astronomy &amp; Astrophysics</i> , <i>Nature</i>   |             |

**TEACHING EXPERIENCE**

- Research mentor, NASA Postdoctoral Program 2013 – present  
 Postdoctoral fellow: Maxime Rizzo, Christopher Stark
- Research advisor, Ph.D. students 2007 – 2016  
 Students: Amy Steele, Ashlee Wilkins, Jessica Donaldson (University of Maryland, College Park), Erika Nesvold (University of Maryland, Baltimore County), Tala Monroe (Indiana University), Lynnae Quick (Catholic University)
- Research advisor, undergraduate and pre-doctoral students 2014 – present  
 Students: Aara’L Yarber, Ameer Blake (Howard University), Tiffany Jansen (University of Washington), Andrew Lincowski (University of Arizona), Brittany Miles (UCLA)
- Guest lecturer, Catholic University of America, Physics Dept. astronomy seminar Fall 2007
- Advisor, Carnegie Institution for Science, Dept. of Terrestrial Magnetism 2003, 2004  
 Research Experience for Undergraduates Summer Program
- Graduate teaching assistant, Johns Hopkins University 1996 – 1997  
 Undergraduate level *General Physics for Biological Science Majors* & general physics lab.

**SELECTED PUBLIC OUTREACH**

- Lecturer, “Finding Earth 2.0: Extraordinary Tools to Expand the Search Space” May 2017  
 Philosophical Society of Washington, Cosmos Club, Washington DC
- Invited speaker, “The Search for Life”, Maryland Space Business Roundtable, Sept. 2016  
 National Air and Space Museum, Washington DC
- Invited speaker, “New Worlds: Current and Future Discoveries in Exoplanets”, Jan. 2016  
 Conference for Undergraduate Women in Physics, Wesleyan University
- Invited speaker, “New Worlds: Current and Future Discoveries in Exoplanets”, Oct. 2015  
 NASA@Howard Lecture Series
- Invited speaker, “Future Exoplanet Missions: Towards Habitable Worlds”, July 2015  
 American Association of Physics Teachers Meeting, College Park MD
- Lecturer, “[The Exoplanet-Starshade Mission Lecture and Panel Discussion](#)”, June & Nov. 2014  
 Adler Planetarium (Chicago IL) & Hayden Planetarium (New York, NY)
- Narrator, “[Nearby Star’s Icy Debris Suggests ‘Shepherd’ Planet](#)”, NASA Mar. 2014  
 Press Feature

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| Lecturer, “New Worlds: Current and Future Discoveries in Exoplanets,”<br>Johns Hopkins University Space Grant Teachers Certificate Program                       | 2012, 2013 |
| Panel member, “Exoplanets and Astrobiology” panel discussion at the<br>Science Fiction & Fantasy Writers of America Nebula Awards Weekend                        | May 2012   |
| Panel member, “Science Fiction & Science Fact” panel discussion for general<br>public, STS-135 Shuttle Launch Event, NASA Kennedy Space Center Visitor’s Complex | July 2011  |
| Interviewee, “ <a href="#">20 Years of Hubble Science: Exoplanets</a> ,” NASA Goddard<br>Multimedia video series   | July 2010  |
| Featured scientist, “ <a href="#">Imagine the Universe!</a> ” educational website, NASA Goddard<br>Space Flight Center   | Fall 2007  |
| <b>INVITED TALKS SINCE 2010</b>  |            |
| University of Colorado, APS Colloquium, Boulder CO   | Apr. 2017  |
| Laboratoire d’Astrophysique de Marseille, Science Colloquium, Marseille, France  | Apr. 2017  |
| Johns Hopkins University, CAS Seminar, Baltimore MD  | Nov. 2016  |
| University of Washington, Astrobiology Colloquium, Seattle WA  | Oct. 2016  |
| University of Maryland College Park, Planetary Astronomy Seminar   | Sept. 2016 |
| Exoplanets Exploration Program Analysis Group Meeting XIV, San Diego CA  | June 2016  |
| Northrop Grumman Search for Life Workshop, Redondo Beach CA  | Mar. 2016  |
| NASA Astrophysics Subcommittee Meeting, Washington DC  | Mar. 2016  |
| Robert H. Goddard Memorial Symposium, Greenbelt MD   | Mar. 2016  |
| Pathways to Habitable Planets II Conference, Bern, Switzerland   | July 2015  |
| Exoplanets Exploration Program Analysis Group Meeting XII, Chicago IL  | June 2015  |
| Gordon Conference on Origins of Solar Systems, South Hadley MA   | June 2015  |
| NASA Astrophysics Subcommittee Meeting, Washington DC  | Mar. 2015  |
| University of Maryland College Park, Astronomy Colloquium  | Feb. 2015  |
| Exoplanets Exploration Program Analysis Group Meeting XI, Seattle WA   | Jan. 2015  |

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| Wide-Field Infrared Surveys: Science and Techniques Conference, Pasadena CA                    | Nov. 2014     |
| 30 Years of Beta Pictoris and Debris Disk Studies Conference, Paris, France                    | Sept. 2014    |
| NASA Sagan Summer Workshop, Pasadena CA ( <a href="#">video of talk</a> )                      | July 2014     |
| NASA Ames Research Center, SOFIA Science Colloquium  | Apr. 2014     |
| Exoplanets Exploration Program Analysis Group Meeting IX, Washington DC                        | Jan. 2014     |
| University of Maryland College Park, Planetary Astronomy Seminar                               | Nov. 2013     |
| University of Notre Dame, Astrophysics Seminar   | Oct. 2013     |
| University of Delaware, Dept. of Physics & Astronomy Colloquium                                | Dec. 2012     |
| Exoplanets Exploration Program Analysis Group Meeting VI, Reno NV                              | Oct. 2012     |
| University of Washington, Astronomy Dept. Colloquium   | Feb. 2012     |
| Exoplanets Exploration Program Analysis Group Meeting V, Austin TX                             | Jan. 2012     |
| NASA Goddard Space Flight Center, Science Jamboree   | June 2011     |
| Exoplanets Exploration Program Analysis Group Meeting IV, Alexandria VA                        | June 2011     |
| Space Telescope Science Institute, ALMA Community Day Workshop                                 | Apr. 2011     |
| Indiana University, Astronomy Dept. Colloquium   | Nov. 2010     |
| Exoplanets Exploration Program Analysis Group Meeting II, Pasadena CA                          | June 2010     |
| NASA Goddard Space Flight Center, Astrophysics Science Division Colloquium                     | Apr. 2010     |
| Johns Hopkins University Applied Physics Lab, Planetary Science Seminar                        | Mar. 2010     |
| The Origin and Fate of the Sun: Evolution of Solar-Mass Stars Conference,<br>Garching, Germany | Mar. 2010     |
| Exoplanets Exploration Program Analysis Group Meeting I, Washington DC                         | Jan. 2010     |
| <b>SELECTED PRESS</b>  |               |
| Scientific American, " <a href="#">20 Big Questions About the Future of Humanity</a> "         | Sept. 1, 2016 |
| Many Worlds website, " <a href="#">Movement in the Search For ExoLife</a> "                    | Jan. 22, 2016 |
| Astronomy Magazine, " <a href="#">ALMA sees icy wreckage in nearby solar system</a> "          | Mar. 7, 2014  |

- Sky & Telescope Magazine, “The Birth of Carbon Planets?” Sept. 2006
- Science News Magazine, “Is this young star ready to form planets?” Nov. 24, 2001

**REFEREED PUBLICATIONS**

(12 first-author, h-index: 29)

65. Hughes, A. M., Lieman-Sifry, J., Flaherty, K. M., Daley, C. M., **Roberge, A.**, Kóspál, Á., Moór, A., Kamp, I., et al. (2017). “Radial Surface Density Profiles of Gas and Dust in the Debris Disk around 49 Ceti.” *The Astrophysical Journal*, 839, 86
64. Debes, J. H., Poteet, C. A., Jang-Condell, H., Gaspar, A., Hines, D., Kastner, J. H., Pueyo, L., Rapson, V., **Roberge, A.**, et al. (2017). “Chasing Shadows: Rotation of the Azimuthal Asymmetry in the TW Hya Disk.” *The Astrophysical Journal*, 835, 205
63. Matrà, L., Dent, W. R. F., Wyatt, M. C., Kral, Q., Wilner, D. J., Panić, O., Hughes, A. M., de Gregorio-Monsalvo, I., et al. (2017). “Exocometary Gas Structure, Origin and Physical Properties Around  $\beta$  Pictoris Through ALMA CO Multitransition Observations.” *Monthly Notices of the Royal Astronomical Society*, 464, 1415
62. Choquet, E., Milli, J., Wahhaj, Z., Soummer, R., **Roberge, A.**, Augereau, J.-C., Booth, M., Absil, O., et al. (2017) “First Scattered-light Images of the Gas-rich Debris Disk around 49 Ceti.” *The Astrophysical Journal*, 834, L12
61. Stark, C. C., Shaklan, S., Lisman, D, Cady, E., Savransky, D., **Roberge, A.**, & Mandell, A. M. (2016). “Maximized ExoEarth Candidate Yields for Starshades.” *Journal of Astronomical Telescopes, Instruments, and Systems*, 2, id. 041204
60. Eiroa, C., Rebollido, I., Montesinos, B., Villaver, E., Absil, O., Henning, Th., Bayo, A., Canovas, H., et al. (2016). “Exocomet signatures around the A-shell star  $\sigma$  Leonis?” *Astronomy & Astrophysics*, 594, L1
59. Marino, S., Matrà, L., Stark, C., Wyatt, M. C., Casassus, S., Kennedy, G., Rodriguez, D., Zuckerman, B., et al. (2016). “Exocometary Gas in the HD 181327 Debris Ring.” *Monthly Notices of the Royal Astronomical Society*, 460, 2933
58. Miles, B. E., **Roberge, A.**, & Welsh, B. (2016). “UV Spectroscopy of Star-Grazing Comets Within the 49 Ceti Debris Disk.” *The Astrophysical Journal*, 824, 126
57. Defrère, D., Hinz, P. M., Mennesson, B., Hoffmann, W. F., Millan-Gabet, R., Skemer, A. J., Bailey, V., Danchi, W. C., et al. (2016). “Nulling Data Reduction and On-Sky Performance of the Large Binocular Telescope Interferometer.” *The Astrophysical Journal*, 824, 66
56. France, K., Parke Loyd, R. O., Youngblood, A., Brown, A., Schneider, P. C., Hawley, S. L., Fron-



- ing, C. S., Linsky, J. L., **Roberge, A.**, et al. (2016). “The MUSCLES Treasury Survey. I. Motivation and Overview.” *The Astrophysical Journal*, 820, 89
55. Stark, C. C., **Roberge, A.**, Mandell, A., Clampin, M., Domagal-Goldman, S. D., McElwain, M. W., & Stapelfeldt, K. (2015). “Lower Limits on Aperture Size for an ExoEarth Detecting Coronagraphic Mission.” *The Astrophysical Journal*, 808, 149
54. Weinberger, A. J., Bryden, G., Kennedy, G. M., **Roberge, A.**, Defrère, D., Hinz, P. M., Millan-Gabet, R., Rieke, G., et al. (2015). “Target Selection for the LBTI Exozodi Key Science Program.” *The Astrophysical Journal Supplement Series*, 216, 24
53. Kennedy, G. M., Wyatt, M. C., Bailey, V., Bryden, G., Danchi, W. C., Defrère, D., Haniff, C., Hinz, P. M., et al. (2015). “Exo-zodi Modeling for the Large Binocular Telescope Interferometer.” *The Astrophysical Journal Supplement Series*, 216, 23
52. Cataldi, G., Brandeker, A., Olofsson, G., Chen, C. H., Dent, W. R. F., Kamp, I., **Roberge, A.**, & Vandenbussche, B. (2015). “Constraints on the gas content of the Fomalhaut debris belt. Can gas-dust interactions explain the belt’s morphology?” *Astronomy & Astrophysics*, 574, L1
51. Defrère, D., Hinz, P. M., Skemer, A. J., Kennedy, G. M., Bailey, V. P., Hoffmann, W. F., Mennesson, B., et al. (2015). “First-light LBT Nulling Interferometric Observations: Warm Exozodiacal Dust Resolved within a Few AU of  $\eta$  Crv.” *The Astrophysical Journal*, 799, 42
50. **Roberge, A.**, Welsh, B., Kamp, I., Weinberger, A. J., & Grady, C. A. (2014). “Volatile-Rich Circumstellar Gas in the Unusual 49 Ceti Debris Disk.” *The Astrophysical Journal*, 796, 11
49. Stark, C. C., **Roberge, A.**, Mandell, A., & Robinson, T. D. (2014). “Maximizing the ExoEarth Candidate Yield from A Future Direct Imaging Mission.” *The Astrophysical Journal*, 795, 122
48. **Roberge, A.** (2014). “Hurling Comets Around a Planetary Nursery.” *Nature*, 514, 440
47. Carmona, A., Pinte, C., Thi, W.-F., Benisty, M., Ménard, F., Grady, C., Kamp, I., Woitke, P., et al. (2014). “Constraining the Structure of the Transition Disk HD 135344B (SAO 206462) by Simultaneous Modeling of Multi-Wavelength Gas and Dust Observations.” *Astronomy & Astrophysics*, 567, A51
46. Dent, W. R. F., Wyatt, M. C., **Roberge, A.**, Augereau, J.-C., Casassus, S., Corder, S., Greaves, J. S., de Gregorio-Monsalvo, I., Hales, A., Jackson, A. P., Hughes, A. M., Lagrange, A.-M., Matthews, B., & Wilner, D. (2014). “Molecular Gas Clumps from the Destruction of Icy Bodies in the  $\beta$  Pictoris Debris Disk.” *Science*, 343, 1490
- NASA press feature about above paper at <http://www.nasa.gov/content/goddard/nearby-stars-icy-debris-suggests-shepherd-planet>
45. Weigert, J., Liseau, R., Thébault, P., Olofsson, G., Mora, A., Bryden, G., Marshall, J. P., Eiroa, C.,

- et al. (2014). “How dusty is  $\alpha$  Centauri? Excess or Non-Excess Over the Infrared Photospheres of Main-Sequence Stars.” *Astronomy & Astrophysics*, 563, A102
44. Howard, C. D., Sandell, G., Vacca, W. D., Duchêne, G., Mathews, G., Augereau, J.-C., Barrado, D., Dent, W. R. F., et al. (2013). “*Herschel*/PACS Survey of Protoplanetary Disks in Taurus/Auriga – Observations of [O I], [C II], and Far-Infrared Continuum.” *The Astrophysical Journal*, 776, 21
43. Krivov, A. V., Eiroa, C., Löhne, T., Marshall, J. P., Montesinos, B., del Burgo, C., Absil, O., Ardila, D., et al. (2013). “*Herschel*’s ‘Cold Debris Disks’: Background Galaxies or Quiescent Rims of Planetary Systems?” *The Astrophysical Journal*, 772, 32
42. Donaldson, J. K., Lebreton, J., **Roberge, A.**, Augereau J.-C., & Krivov, A. V. (2013). “Modeling the HD32297 Debris Disk with Far-IR *Herschel* Data.” *The Astrophysical Journal*, 772, 17
41. **Roberge, A.**, Kamp, I., Montesinos, B., Dent, W. R. F., Meeus, G., Donaldson, J. K., Olofsson, J., Moór, A., Augereau, J.-C., Howard, C., Eiroa, C., Thi, W.-F., Ardila, D. R., Sandell, G., & Woitke, P. (2013). “*Herschel* Observations of Gas and Dust in the Unusual 49 Ceti Debris Disk.” *The Astrophysical Journal*, 771, 69
40. Debes, J. H., Jang-Condell, H., Weinberger, A. J., **Roberge, A.**, & Schneider, G. (2013). “The 0.5-2.22  $\mu\text{m}$  Scattered Light Spectrum of the Disk Around TW Hya: Detection of a Partially Filled Disk Gap at 80 AU.” *The Astrophysical Journal*, 771, 45
39. Riviere-Marichalar, P., Pinte, C., Barrado, D., Thi, W.-T., Eiroa, C., Kamp, I., Montesinos, B., Donaldson, J., Augereau, J.-C., Huéramo, N., **Roberge, A.**, Ardila, D., Sandell, G., Williams, J. P., Dent, W. R. F., Ménard, F., Lillo-Box, J., & Duchêne, G. (2013). “Gas and Dust in the TW Hydrae Association As Seen By the *Herschel Space Observatory*.” *Astronomy & Astrophysics*, 555, A67
38. Eiroa, C., Marshall, J. P., Mora, A., Montesinos, B., Absil, O., Augereau, J.-C., Bayo, A., Bryden, G., et al. (2013). “Dust Around NEarby Stars. The Survey Observational Results.” *Astronomy & Astrophysics*, 555, A11
37. Dent, W. R. F., Thi, W.-F., Kamp, I., Williams, J. P., Ménard, F., Andrews S., Ardila, D., Aresu, G., et al. (2013). “GASPS – a *Herschel* Survey of Gas and Dust in Protoplanetary Disks: Summary and Initial Statistics.” *Publications of the Astronomical Society of the Pacific*, 125, 477
36. France, K., Froning, C. S., Linsky, J. L., **Roberge, A.**, Stocke, J. T., Feng, T., Bushinsky, R., Désert, J.-M., Mauas, P., Vieytes, M., & Walkowicz, L. M. (2013). “The Ultraviolet Radiation Environment around M Dwarf Exoplanet Host Stars.” *The Astrophysical Journal*, 763, 149
35. Liseau, R., Montesinos, B., Olofsson, G., Bryden, G., Marshall, J. P., Ardila, D., Bayo Aran, A., Danchi, W. C., del Burgo, C., Eiroa, C., Ertel, S., Fridlund, M. C. W., Krivov, A. V., Pilbratt, G., **Roberge, A.**, Thébault, P., Weigert, J., & White, G. J. (2013). “ $\alpha$  Centauri A in the Far Infrared. First Measurement of the Temperature Minimum of a Star Other Than the Sun.” *Astronomy &*

Astrophysics, 549, L7

34. Riviere-Marichalar, P., Barrado, D., Augereau, J.-C., Thi, W.-F., **Roberge, A.**, Eiroa, C., Montesinos, B., Meeus, G., Howard, C., Sandell, G., Duchêne, G., Dent, W. R. F., Lebreton, J., Mendigutía, I., Huélamo, Ménard, F., & Pinte, C. (2012). “HD172555: Detection of 63  $\mu\text{m}$  [OI] Emission in a Debris Disk.” *Astronomy & Astrophysics*, 546, L8
33. **Roberge, A.**, Chen, C. H., Millan-Gabet, R., Weinberger, A. J., Hinz, P. M., Stapelfeldt, K. R., Absil, O., Kuchner, M. J., & Bryden, G. (2012). “The Exozodiacal Dust Problem for Direct Observations of ExoEarths.” *Publications of the Astronomical Society of the Pacific*, 124, 799
32. Meeus, G., Montesinos, B., Mendigutía, I., Kamp, I., Thi, W.-F., Eiroa, C., Grady, C. A., Mathews, G., Sandell, G., Martin-Zaïdi, C., Brittain, S., Dent, W. R. F., Howard, C., Ménard, F., Pinte, C., **Roberge, A.**, Vandenbussche, B., & Williams, J. (2012). “Observations of Herbig Ae/Be stars with Herschel/PACS. The Atomic and Molecular Contents of Their Protoplanetary Discs.” *Astronomy & Astrophysics*, 544, A78
31. Donaldson, J. K., **Roberge, A.**, Chen, C. H., Augereau, J.-C., Dent, W. R. F., Eiroa, C., Krivov, A. V., Mathews, G. S., Meeus, G., Ménard, F., Riviere-Marichalar, P., & Sandell, G. (2012). “Herschel PACS Observations and Modeling of Debris Disks in the Tucana-Horologium Association.” *The Astrophysical Journal*, 753, 147
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#### **Accepted & Submitted Publications**

2. Youngblood, A., France, K., Parke Loyd, R. O., Brown, A., Mason, J. P., Schneider, P. C., Tilley, M. A., Berta-Thompson, Z. K., et al. (2017). “The MUSCLES Treasury Survey IV: Scaling Relations for Ultraviolet, Ca II K, and Energetic Particle Fluxes from M Dwarfs.” *The Astrophysical Journal*, in press
1. Pelayo-Baldarrago1, M., Sicilia-Aguilar, A., **Roberge, A.**, & Quick L. (2017). “Feedback, Interactions, and Multiplicity in the Coronet Cluster.” *Astronomy & Astrophysics*, submitted