

Thayne Currie – Publications List

Address	University of Texas-San Antonio 1 UTSA Circle San Antonio, TX	Office Phone Email Webpage	(210) 458-5446 currie@naoj.org thayne.currie@utsa.edu http://www.naoj.org/staff/currie/
----------------	---	---	---

Bibliography

39 First-Author Peer-Reviewed Journal Publications

108 Contributing Author Peer-Reviewed Journal Publications, 2 Submitted, 1 in Preparation

4 First-Author SPIE Proceedings Technical Papers

23 Contributing Author SPIE Proceedings Technical Papers

6 First-Author White Papers/Conference Proceedings/Other Publications

17 Contributing Author White Papers/Conference Proceedings/Other Publications

Citations: Total - 5808, First Author - 1997; H-index: Total 43, First Author - 25

(***boldface with asterisks** denotes student lead and advised publications)

Peer-Reviewed Journal Publications

150. “Direct Imaging and Astrometric Detection of a Gas Giant Planet Orbiting an Accelerating Star”, **Currie, T.**, et al., 2023, Science, 380, 198
149. “Direct Imaging Explorations for Companions around Mid-Late M Stars from the Subaru/IRD Strategic Program”, Uyama, T., ..., **Currie, T.**, et al., 2023, AJ, 165, 162
148. “Surveying Nearby Brown Dwarfs with HGCA: Direct Imaging Discovery of a Faint, High-Mass Brown Dwarf Orbiting HD 176535 A”, Li, Y., ...**Currie, T.**, et al., 2023, MNRAS in press
147. “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”, Miles, B., ...**Currie, T.**, et al., 2023, ApJL, 946, L6
146. “The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems I: High Contrast Imaging of the Exoplanet HIP 65426 b from 2-16 microns”, Carter, A., ...**Currie, T.**, et al., 2022, AAS Journals, submitted
145. “Images of Embedded Jovian Planet Formation at a Wide Separation around AB Aurigae”, **Currie, T.**, et al., 2022 Nature Astronomy, 6, 751
144. “From Dust to Nanodust: Resolving Circumstellar Dust from the Colliding-Wind Binary Wolf-Rayet (WR) 140”, Lau, R., Wang, J. J., **Currie, T.**, et al., 2022, AAS Journals submitted
143. “A Super-Earth Orbiting Near the Inner Edge of the Habitable Zone around the M4.5-dwarf Ross 508”, Harakawa, H., ..., **Currie, T.**, et al., 2022, PASJ, 74, 904
- ***142.** “Polarimetry-Constrained PSF Subtraction: Distinguishing Embedded Planets in the Presence of Highly Structured Disks”, Lawson, K., **Currie, T.**, Wisniewski, J., 2022, ApJL, 935, L25
- ***141.** “SCEXAO/CHARIS High-Contrast Spectroscopy of HD 1160 B”, Torres-Quijado, A., **Currie, T.**, et al., 2022, AAS Journals, in prep.
140. “SCEXAO/MEC+CHARIS+VAMPIRES and Keck/NIRC2 Direct Imaging Discovery of a Candidate Substellar Companion Around the Young, Accelerating F5 Star HIP 5319”, Swimmer, N., **Currie, T.**, et al., 2022, AJ, 164, 152
139. “The JWST Early Release Science Program for the Direct Imaging and Spectroscopy of Exoplanetary Systems”, Hinkley, S., ...**Currie, T.**, et al., 2022, PASP, 134, 5003
138. “Direct Imaging and Spectroscopy of Extrasolar Planets”, **Currie, T.**, Biller, B., Lagrange, A.-M., et al., 2022, Protostars and Planets VII, in press
137. “Monitoring Inner Regions in the RY Tau Jet”, Uyama, T., ..., **Currie, T.**, et al., 2022, ApJ, 163, 268
136. “SCEXAO/CHARIS Direct Imaging Discovery of a Benchmark Substellar Companion at the Planet/Brown Dwarf Boundary Orbiting an Accelerating Hyades Star”, Kuzuhara, M., **Currie, T.**, et al., 2022, ApJL, 934, L18
135. “Elemental abundances of nearby M dwarfs based on high-resolution near-infrared spectra obtained by

- the Subaru/IRD survey: Proof of concept*", Ishikawa, H., ..., **Currie, T.**, et al., 2022, AJ, 163, 72
134. "Precise Dynamical Masses with Hipparcos–Gaia eDR3 Accelerations, Brandt, G. M., ..., **Currie, T.**, 2021, AJ, 162, 301
- *133. "SCEXAO/CHARIS Near-IR Integral Field Spectroscopy of the HD 36546 Debris Disk", Lawson, K., **Currie, T.**, et al., 2021, AJ, 162, 293
- *132. "SCEXAO/MEC and CHARIS Discovery of a Low Mass, Jupiter-Separation Companion to HIP 109427 using Stochastic Speckle Discrimination and High-Contrast Spectroscopy", Steiger, S., **Currie, T.**, et al., 2021, AJ, 162, 44
131. "SCEXAO/CHARIS Direct Imaging Discovery of Low-Mass Companion At A Saturn-Like Separation from an Accelerating Dusty, Young A7 Star", Chilcote, J., Tobin, T., **Currie, T.**, et al., 2021, AJ, 162, 251
130. "On-sky validation of image-base adaptive optics wavefront sensor referencing", Skaf, N., ..., **Currie, T.**, et al. 2021, A&A, 659, 170
129. "First On-Sky Demonstration of Spatial Linear Dark Field Control with the vector-Apodizing Phase Plate at Subaru/SCEXAO", Bos, S., ..., **Currie, T.**, et al., 2021, A&A, 653, 42
128. "Spatial linear dark field control on Subaru/SCEXAO Maintaining high contrast with a vAPP coronagraph", Miller, K., ..., **Currie, T.**, 2021, A&A, 646, 145
127. "SCEXAO/CHARIS Direct Imaging Discovery of a 20 au-Separation, Low-Mass Ratio Brown Dwarf Companion to an Accelerating Sun-like Star", **Currie, T.**, et al., 2020, ApJL, 904, L25
126. "The MKID Exoplanet Camera for Subaru SCEXAO", Walter, A., ..., **Currie, T.**, et al., 2020, PASP, 132, 5005
125. "Imaging and Spectroscopy of a Young Brown Dwarf Companion to an A2V Star", Wagner, K., ..., **Currie, T.**, 2020, ApJL, 902, 6
124. "Laboratory Demonstration of Spatial Linear Dark Field Control For Imaging Extrasolar Planets in Reflected Light", **Currie, T.** et al., 2020, PASP, 132, 4502
123. "SCEXAO/CHARIS High-contrast Integral Field Spectroscopy of the HD 34700 Protoplanetary Disk", Uyama, T., **Currie, T.**, et al., 2020, ApJ, 900, 135
- *122. "SCEXAO/CHARIS Near-IR Integral Field Spectroscopy of the HD 15115 Debris Disk", Lawson, K., **Currie, T.**, et al., 2020, AJ, 160, 163
121. "Near-infrared Imaging of a Spiral in the CQ Tau Disk", Uyama, T., ..., **Currie, T.**, et al., 2020, ApJL, 159, 118
120. "MIRACLES: atmospheric characterization of directly imaged planets and substellar companions at 4–5 μm ", Stolker, T., ..., **Currie, T.**, et al., 2020, A&A, 635, 182
119. "High-resolution Near-infrared Polarimetry and Submillimeter Imaging of FS Tau A: Possible Streamers in Misaligned Circumbinary Disk System", Yang, Y., Akiyama, E., **Currie, T.**, et al., 2020, ApJ, 889, 140
118. "Atmospheric Characterization and Further Orbital Modeling of κ And b", Uyama, T., **Currie, T.**, Hori, Y., et al., 2019, AJ, 159, 40
117. "Subaru Near-Infrared Imaging Polarimetry of Misaligned Disks Around the SR 24 Hierarchical Triple System", Mayama, S., ..., **Currie, T.**, et al., 2019, ApJ, 159, L12
116. (abridged) "No Clear, Direct Evidence for Multiple Protoplanets Orbiting LkCa 15", **Currie, T.**, Marois, C., Cieza, L., et al. 2019, ApJL, 877, L3
115. "Near-Infrared Imaging of a Spiral in the CQ Tau Disk", Uyama, T., ..., **Currie, T.** et al., 2019, ApJ Letters, in press
114. "Multiple Rings of Millimeter Dust Emission in the HD 15115 Debris Disk", MacGregor, M., ..., **Currie, T.** et al., 2019, ApJL, 877, L32
113. "An Exoplanet Survey of Two-Component Debris Disks with SCEXAO/CHARIS: Chromaticity Analysis and PSF Subtraction Techniques", Gerard, B., Marois, C., **Currie, T.**, et al., 2019, AJ, 158, 36
- *112. "On the isochronal age-mass discrepancy of young stars: SCEXAO/CHARIS integral field spectroscopy of the HIP 79124 triple system", Asensio-Torres, R., **Currie, T.**, Janson, M., et al., 2019, A&A, 622, 42
- *111. "Multi-Epoch Direct Imaging and Time-Variable Scattered Light Morphology of the HD 163296 Protoplanetary Disk", Rich, E., Wisniewski, J., **Currie, T.**, et al., 2019, AJ, 875, 38
110. "VLT/SPHERE Multi-Wavelength Imaging of the HD 115600 Debris Disk", Gibbs, A., Wagner, K., Apai, D., **Currie, T.**, et al., 2019, AJ, 157, 39
109. (abridged) "SCEXAO/CHARIS Near-Infrared Direct Imaging, Spectroscopy, and Forward-Modeling of κ And b", **Currie, T.**, Brandt, T., Uyama, T., et al., 2018, AJ, 156, 291
- *108. "SCEXAO Near-IR High-Contrast Imaging and Integral Field Spectroscopy of the HIP 79977 Debris Disk", Goebel, S., **Currie, T.**, Guyon, O., et al., 2018, AJ, 156, 279
107. "ALMA Detection of Extended Millimeter Haloes in the HD 32297 and HD 61005 Debris Disks", MacGregor, M., Weinberger, A., Hughes, A. M., ... **Currie, T.**, et al., 2018, ApJ, 869, 75
106. "ALMA reveals a misaligned, HCO⁺-rich, inner gas disk inside the large cavity of the transitional disk

around J160421.7-213028”, Mayama, S., Akiyama, E., Panic, O., ...**Currie, T.**, et al., 2018, ApJ, 868, L3

105. “Subaru/HiCIAO HK s Imaging of LKHa 330: Multi-band Detection of the Gap and Spiral-like Structures” Uyama, T., ...**Currie, T.** et al., 2018, AJ, 156, 63

104. “High-contrast Polarimetry Observation of the T Tau Circumstellar Environment” Yang, Y., ...**Currie, T.**, et al., 2018, ApJ, 861, 133

103. “Differences in the Gas and Dust Distribution in the Transitional Disk of a Sun-like Young Star, PDS 70” Long, Z., ...**Currie, T.**, et al., 2018, ApJ, 858, L112

102. “An H-band Vector Vortex Coronagraph for the Subaru Coronagraphic Extreme-adaptive Optics System” Kuhn, J., Serabyn, E., Lozi, J., Jovanovic, N., **Currie, T.**, et al., 2018, PASP, 130, 5001

101. “Laboratory and On-Sky Validation of the Shaped Pupil Coronagraph’s Sensitivity to Low-Order Aberrations With Active Wavefront Control”, **Currie, T.**, Kasdin, N. J., Groff, T., et al., 2018, PASP, 130, 4505

100. “High-Contrast Polarimetry Observations of the T Tau Circumstellar Environment” Yang, Y., ...**Currie, T.**, et al., 2018, PASJ, 871, 133

99. “A New Standard for Assessing the Performance of High Contrast Imaging Systems”, Jensen-Clem, R., Mawet, D., Gomez Gonzalez, C., ... **Currie, T.**, et al., 2018, AJ, 155, 19

98. “Data Reduction Pipeline for the CHARIS Integral-Field Spectrograph” Brandt, T., ... **Currie, T.**, et al., 2017, JATIS, 3, 8002

97. “The fundamental stellar parameters of FGK stars in the SEEDS survey” Rich, E., ...**Currie, T.**, et al., 2017, MNRAS, 472, 1736

96. “Efficient injection from large telescopes into single-mode fibres: Enabling the era of ultra-precision astronomy” Jovanovic, N., ... **Currie, T.**, et al., 2017, A&A, 604, 122

95. “IRTF/SpEx Observations of HD 36546: Evidence for a Second, Warm Dust Component”, Lisse, C., Sitko, M., Russell, R. W., Marengo, M., **Currie, T.**, Melis, C., 2017, ApJL, 840, L20

94. “Testing giant planet formation in the transitional disk of SAO 206462 using deep VLT/SPHERE imaging”, Maire, A.-L., Stolker, T., Muller, A., Biller, B. A., **Currie, T.**, et al., 2017, A&A, 601, 134

93. “SCEAO First-Light Direct Imaging of a Bright Debris Disk Around HD 36546” **Currie, T.**, Guyon, O., Jovanovic, N., et al., 2017, ApJL, 836, L15

*92. “Mid-infrared characterization of the planetary-mass companion ROXs 42B b” Daemgen, S., Todorov, K., Silva, J., ...**Currie, T.** et al., 2017, A&A, 601, 65

*91. “SCEAO and GPI YJH Band Photometry and Integral Field Spectroscopy of the Young Brown Dwarf Companion to HD 1160” Garcia, E. V., **Currie, T.**, Guyon, O., et al., 2017, ApJ, 834, 162

90. “Radial decoupling of small and large dust grains in the transitional disk RX J1615.3-3255 ” Kooistra, R., Kamp, I., Fukagawa, M., ...**Currie, T.**, et al., 2017, A&A, 597, 132

89. “The SEEDS High-Contrast Imaging Survey of Exoplanets Around Young Stellar Objects” Uyama, T., ...**Currie, T.**, et al., 2017, AJ, 153, 106

88. “A New M Dwarf Debris Disk Candidate in a Young Moving Group Discovered with Disk Detective” Silverberg, S., Kuchner, M., Wisniewski, J., ... **Currie, T.** et al., 2016, ApJL, 830, L28

87. “Resolved Near-Infrared Image of Inner Cavity in GM Aur Transitional Disk” Oh, D., Hashimoto, J., Carson, J. C., ...**Currie, T.**, et al., 2016, ApJL, 831, L7

86. “SEEDS direct imaging of the RV-detected companion to V450 Andromedae, and characterization of the system” Helminiak, K. G., Kuzuhara, M., Brandt, T. D., ...**Currie, T.**, et al., 2016, ApJ, 832, 33

*85. (abridged) “Thermal Infrared Imaging and Atmospheric Modeling of VHS J125601.92-125723.9 b” Rich, E., **Currie, T.**, Wisniewski, J., et al., 2016, ApJ, 830, 114

84. “Disk Detective: Discovery of New Circumstellar Disk Candidates through Citizen Science” Kuchner, M., Silverberg, S., Bans, A., ...**Currie, T.** et al., 2016, ApJ, 830, 84

83. “Constraining the Movement of the Spiral Features and the Locations of Planetary Bodies within the AB Aur System” Lomax, J., Wisniewski, J., Grady, C., ...**Currie, T.**, et al., 2016, ApJ, 828, 2

82. “High-contrast Imaging of Intermediate-mass Giants with Long-term Radial Velocity Trends”, Ryu, T., Sato, B., Kuzuhara, M., ... **Currie, T.** et a., 2016, ApJ, 825, 127

81. “Extreme asymmetry in the polarized disk of V1247 Orionis” Ohta, Y., Fukagawa, M., Sitko, M. L., ... **Currie, T.** et al., 2016, PASJ, 68, 53

80. “Polarimetry and Flux Distribution in the Debris Disk around HD 32297” Torres, R., Janson, M., ...**Currie, T.**, et al., 2016, A&A, 593, 73

79. “The Matryoshka Disk: Keck/NIRC2 Discovery of a Solar System Scale, Radially-Segregated Residual Protoplanetary Disk Around HD 141569A”, **Currie, T.**, et al., 2016, ApJ, 819, L26

78. “Near-Infrared Imaging Polarimetry of LkCa 15: A Possible Warped Inner Disk”, Oh, D., Hashimoto, J., Tamura, M., ... **Currie, T.**, et al., 2016, PASJ, 68, 3

77. “Resolving the HD 100546 Protoplanetary System with the Gemini Planet Imager: Evidence for Multiple

- Forming, Accreting Planets”, **Currie, T.**, Cloutier, R., Grady, C., et al., 2015, ApJ, 814, L27
76. “Near-IR Polarized Scattered Light Imagery of the DoAr 28 Transitional Disk, Rich, E., ..., **Currie, T.**, et al., 2015, AJ, 150, 86
75. “Direct Imaging and Spectroscopy of a Young Extrasolar Kuiper Belt in the Nearest OB Association”, **Currie, T.**, Lisse, C., Kuchner, M., et al., 2015, ApJ, 807, L7
74. “Detailed structure of the outer disk around HD 169142 with polarized light in H-band”, Momose, M., ..., **Currie, T.**, et al., 2015, PASJ, 67, 83
73. “Near-IR High-Resolution Imaging Polarimetry of the SU Aur Disk: Clues for Tidal Tails?”, de Leon, J., ..., **Currie, T.**, et al., 2015, ApJ, 806, L10
72. “Thirty Meter Telescope Detailed Science Case: 2015”, Skidmore, W., ..., **Currie, T.**, et al. 2015, arxiv:1505.01195
71. “The outer disks of Herbig stars from the UV to NIR”, Grady, C., ..., **Currie, T.**, et al., 2015, Ap&SS, 355, 253
70. “Discovery of a Disk Gap Candidate at 20 AU in TW Hydrae”, Akiyama, ..., **Currie, T.**, et al., 2015, ApJ, 802, L17
69. “SEEDS Adaptive Optics Imaging of the Asymmetric Transition Disk Oph IRS 48 in Scattered Light, Follette, K., Grady, C., Swearingen, J., ..., **Currie, T.**, et al., 2015, ApJ, 798, 132
68. “Variability of Disk Emission in Pre-Main Sequence and Related Stars. III. Exploring Structural Changes in the Pre-transitional Disk in HD 169142”, Wagner, K., Sitko, M., Grady, C., ..., **Currie, T.**, et al., 2015, ApJ, 798, 94
67. “The Structure of Pre-transitional Protoplanetary Disks. II. Azimuthal Asymmetries, Different Radial Distributions of Large and Small Dust Grains in PDS 70”, Hashimoto, J., ... **Currie, T.**, et al., 2015, ApJ, 799, 43
66. “The Herschel/PACS view of the CepOB2 region: Clumpy star formation and global protoplanetary disk evolution”, Sicilia-Aguilar, A., ..., **Currie, T.**, 2015, A&A, 573, 19
65. “Recovery of the Candidate Protoplanet HD 100546 b with Gemini/NICI and Evidence for Additional (Planet Induced?) Disk Structure at Small Separations”, **Currie, T.**, Muto, T., Kudo, T., et al., 2014, ApJ, 796, L30
64. (Abridged) “Deep, Thermal IR Imaging of HR 8799 bcde”, **Currie, T.**, Burrows, A., Girard, J., et al., 2014, ApJ, 795, 133
63. “Indications of M-dwarf Deficits in the Halo and Thick Disk of the Galaxy”, Konishi, M., ..., **Currie, T.**, et al., 2015, PASJ, 67, 1
62. (Abridged) “An Analysis of the SEEDS High-Contrast Exoplanet Survey”, Brandt, T., ... **Currie, T.**, et al. 2014, ApJ, 794, 159
61. “On-sky speckle nulling demonstration at small angular separation with SCExAO”, Martinache, F., ... **Currie, T.**, et al. 2014, PASP, 126, 565
60. “Fomalhaut b As A Cloud of Dust: Testing Aspects of Icy Planet Formation Theory”, Kenyon, S. J., **Currie, T.**, Bromley, B., 2014, ApJ, 786, 70
59. “Near-infrared detection and characterization of the exoplanet HD95086 b with the Gemini Planet Imager”, Galicher, R., ... **Currie, T.**, et al. 2014, A&A, 565, L4
58. “A First-Look Study of the Atmosphere of the Planet-Mass Companion to ROXs 42B”, **Currie, T.**, Burrows, A., et al., 2014, ApJ, 786, 70
- *57. “A Deep Spitzer Survey of Circumstellar Disks in the Young Double Cluster, η and χ Persei”, Cloutier, R., **Currie, T.**, et al., 2014, ApJ, 796, 127
56. (Abridged) “An Analysis of the SEEDS High-Contrast Exoplanet Survey”, Brandt, T., ... **Currie, T.**, et al. 2014, ApJ, 794, 159
55. “Near-Infrared Polarimetry of the GG Tauri A Binary System”, Itoh, Y., Oasa, Y., Kudo, T., ..., **Currie, T.**, et al. 2014, RAA, 14, 1438
54. “Surface Geometry of Protoplanetary Disks Inferred From Near-Infrared Imaging Polarimetry”, Takami, H., ..., **Currie, T.**, et al. 2014, ApJ, 795, 71
53. “Does the Debris Disk Around HD 32297 Contain Cometary Grains?”, Rodigas, T. J., ... **Currie, T.**, et al. 2014, ApJ, 783, 21
52. “Direct Imaging and Spectroscopy of a Candidate Companion Below/Near the Deuterium-Burning Limit In The Young Binary Star System, ROXs 42B”, **Currie, T.**, Daemgen, S., Debes, J., Lafreniere, D., Itoh, Y., Jayawardhana, R., Ratzka, T., Correia, S., 2014, 780, L30
51. “A Herschel view of the bright-rimmed cloud IC 1396 A: Unveiling the different sequences of star formation, Sicilia-Aguilar, A., ..., **Currie, T.**, 2014, A&A, 562, 131
50. “Investigation of Kepler Objects of Interest Stellar Parameters from Observed Transit Durations”, Plavchan, P., Bilinski, C., **Currie, T.**, 2014, PASP, 126, 34
49. “Confirmation of the Planet Around HD 95086 by Direct Imaging”, Rameau, J., ..., **Currie, T.**, et al., 2013, ApJ, 779, L26
48. “Direct Imaging Detection of Methane in the Atmosphere of GJ 504 b”, Janson, M., ... **Currie, T.**, et al., 2013,

ApJ, 778, L4

47. “A Deep Keck/NIRC2 Search for Thermal Emission from Planetary Companions Orbiting Fomalhaut”, **Currie, T.**, Cloutier, R., Debes, J., 2013, ApJ, 777, L6
46. “A Combined VLT/NaCo and Gemini/NICI Study of the Atmosphere of the Directly-Imaged Planet, β Pic b”, **Currie, T.**, Burrows, A., et al., 2013, ApJ, 776, 15
45. “Further Evidence of the planetary nature of HD 95086 b from Gemini/NICI H-band data”, Meshkat, T., Bailey, V., ...**Currie, T.**, 2013, ApJ, 775, L40
44. “High-contrast Near-infrared Imaging Polarimetry of the Protoplanetary Disk around RY Tau”, Takami, H., Karr, J., ...**Currie, T.**, et al., 2013, ApJ, 772, 145
43. “The Moving Group Targets of the SEEDS High-Contrast Imaging Survey of Exoplanets and Disks: Results and Observations from the First Three Years”, Brandt, T., ...**Currie, T.**, et al., 2014, ApJ, 786, 1
42. “A Direct Imaging Survey for Planets and Scattered Dust Emission in Debris Disk Systems, Janson, M., ..., **Currie, T.**, et al. 2013, ApJ, 773, 73
41. “A Keck and LBT Study of the Atmosphere of the Directly-Imaged Exoplanet Candidate, κ And b”, Bonnefoy, M., **Currie, T.**, Carson, J., McElwain, M., Thalmann, C., et al., 2013, A&A, 562, 111
40. (Abridged) “A Thermal Infrared Imaging Study of Very Low-Mass, Wide Separation Brown Dwarf Companions to Upper Scorpius Stars”, Bailey, V., Hinz, P., **Currie, T.**, Su, K., Esposito, S., et al., 2013, ApJ, 767, 31
39. “Scattered Light Imagery of the Mysterious Transitional Disk Around SR 21”, Follette, K., ...**Currie, T.**, et al. 2013, ApJ, 767, 10
38. “Direct Imaging Search for Extrasolar Planets in the Pleiades”, Yamamoto, K., ..., **Currie, T.**, et al., 2013, PASJ, 65, 90
37. “Direct Imaging Discovery of a ‘Super-Jupiter’ Around a Late-Type B Star”, Carson, J., ..., **Currie, T.** et al., 2012, ApJ, 763, L32
36. “Imaging Discovery of the Debris Disk around HIP 79977”, Thalmann, C., ..., **Currie, T.**, et al., 2012, ApJ, 763, L29
35. “Spiral Arms in the Asymmetrically Illuminated Disk of MWC 758 and Constraints on Giant Planets”, Grady, C., ..., **Currie, T.** et al., 2012, ApJ, 762, 48
34. “Direct Imaging Confirmation and Characterization of a Dust-Enshrouded Candidate Exoplanet Orbiting Fomalhaut”, **Currie, T.**, et al., 2012, ApJ, 760, L32
33. “Keck/NIRC2 Imaging of the Warped, Asymmetric Debris Disk Around HD 32297”, **Currie, T.**, Rodigas, T., Debes, J., et al., 2012, ApJ, 757, 28
32. “Direct Detection and Orbital Analysis of the Exoplanets HR 8799 bcd from Archival 2005 Keck/NIRC2 Data”, **Currie, T.**, et al., 2012, 755, L34
31. “CfA4: Light Curves for 94 Type Ia Supernovae”, Hicken, M., ... **Currie, T.**, et al., 2012, ApJS 30. “High-Resolution Near-IR Polarimetry of a Circumstellar Disk around UX Tau A”, Tani, R., ..., **Currie, T.**, et al., 2012, PASJ, 64, 124
29. (Abridged) “The Grey Needle: LBT Imaging of the HD 15115 Debris Disk”, Rodigas, T., ... **Currie, T.**, et al., 2012, ApJ, 752, 57
28. “Discovery of Small-scale Spiral Structures in the Disk of SAO 206462”, Muto, T., ... **Currie, T.**, et al., 2012, ApJ, 748, L22
27. “Dust Attenuation and $H\alpha$ Star Formation Rates of $z \approx 0.5$ Galaxies”, Ly, C., ... **Currie, T.**, 2012, ApJ, 747, L16
26. (Abridged) “Spitzer Observations of η Corvi”, Lisse, C., ...**Currie, T.**, et al., 2012, ApJ, 747, 93
25. (Abridged) “A 5 Micron Image of β Pic b at a Sub-Jupiter Projected Separation”, **Currie, T.**, Thalmann, C., Matsumura, S., Madhusudhan, N., Burrows, A., Kuchner, M., 2011, ApJ, 736, 33L
24. (Abridged) “Model Atmospheres for Massive Gas Giants with Thick Clouds”, Madhusudhan, N., Burrows, A., **Currie, T.**, 2011, ApJ, 737, 34
23. “A Combined Subaru/VLT/MMT 1–5 Micron Study of Planets Orbiting HR 8799: Implications for Atmospheric Properties, Masses, and Formation”, **Currie, T.**, Burrows, A., Itoh, Y., Matsumura, S., Fukagawa, M., et al., 2011, ApJ, 729, 128
22. “Near-infrared imaging survey of faint companions around young dwarfs in the Pleiades cluster”, Itoh, Y., ...**Currie, T.**, 2011, RAA, 11, 335
21. (Abridged) “Spitzer IRS Observations of EF Cha”, **Currie, T.**, Lisse, C., et al., 2011, ApJ, 734, 115
20. (Abridged) “The Transitional Protoplanetary Disk Frequency as a Function of Stellar Age”, **Currie, T.**, Sicilia-Aguilar, A., 2011, ApJ, 732, 24
19. “High-Contrast 3.8 μ m Imaging of the Brown Dwarf/Planet-Mass Companion to GJ 758”, **Currie, T.**, et al., 2010, ApJ, 721, 177L
18. “Analysis of the B and Be star population in h and χ Persei”, Marsh, A., McSwain, M. V., **Currie, T.**, 2010, IAU

17. “*The Stellar Population of h and χ Persei*”, **Currie, T.**, et al., 2010, ApJS, 186, 191
16. “*Deep MIPS Observations of the IC 348 Nebula: Constraints on the Evolutionary State of Anemic Circumstellar Disks and the Primordial to Debris Disk Transition*”, **Currie, T.**, Kenyon, S. J., 2009, AJ, 138, 703
15. “*The Pulsar Planets: A Test Case of Terrestrial Planet Assembly*”, Hansen, B., Shih, H-Y., **Currie, T.**, 2009, ApJ, 691, 382
14. “*Lyman Break Galaxies at $Z \sim 1.8$ -2.8: GALEX/NUV Imaging of the Subaru Deep Field*”, Ly, C., Malkan, M., Treu, T., Woo, J-H, **Currie, T.**, Hayashi, M., Kashikawa, N., Motohara, K. Shimasaku, K., and Yoshida, M., 2009, ApJ, 697, 1410
13. “*The Last Gasp of Gas Giant Planet Formation: A Spitzer Study of the 5 Myr-old Open Cluster NGC 2362*”, **Currie, T.**, Lada, C. J., Plavchan, P., et al., 2009, ApJ, 698, 1
12. “*On the Semimajor Axis Distribution of Extrasolar Gas Giant Planets: Why Hot Jupiters Are Rare Around High-Mass Stars*”, **Currie, T.**, 2009, ApJ, 691L, 171
11. “*The X-ray Environment During the Epoch of Terrestrial Planet Formation: Chandra Observations of h Persei*”, **Currie, T.**, Evans, N., et al., 2009, AJ, 137, 3210
10. “*A Spitzer Study of Debris Disks in the Young Nearby Cluster NGC 2232: Icy Planets Are Common Around 1.5–3 $M_{\odot}$ stars*”, **Currie, T.**, Plavchan, P., Kenyon, S., 2008, ApJ, 688, 594
9. “*The Gemini/TEXES Survey for H_2 in Disks*”, Bitner, M., Richter, M., Lacy, J.,, **Currie, T.**, et al., 2008, ApJ, 688, 1326
8. “*The Rise and Fall of Debris Disks: MIPS Observations of h and χ Persei and the Evolution of Mid-IR Emission from Planet Formation*”, **Currie, T.**, Kenyon, S., Balog, Z., Rieke, G., Bragg, A., Bromley, B., 2008, ApJ, 672, 558
7. “*Discovery of Gas Accretion onto Stars in 13 Myr old h and χ Persei*”, **Currie, T.**, Kenyon, S., Balog, Z., Bragg, A., and Tokarz, S., 2007, ApJ, 669L, 33
6. “*The Evolution of Protoplanetary Disks Around Millisecond Pulsars: The PSR 1257+12 System*”, **Currie, T.**, Hansen, B., 2007, ApJ, 666, 1232
5. “*Terrestrial Zone Debris Disk Candidates in h and χ Persei*”, **Currie, T.**, Kenyon, S., Rieke, G., Bromley, B., and Balog, Z., 2007, ApJ, 663L, 105
4. “*Spitzer/IRAC and JHK_s Observations of h and χ Persei: Constraints on Massive Cluster and Protoplanetary Disk Evolution at 10^7 yr*”, **Currie, T.**, Balog, Z., Kenyon, S., Rieke, G., et al., 2007, ApJ, 659, 599
3. “*Hybrid Mechanisms for Gas/Ice Giant Planet Formation*”, **Currie, T.**, 2005, ApJ, 625, 549
2. “*Hubble Space Telescope Observations of the White Dwarf Cooling Sequence of M4*”, Hansen, B., Richer, H., **Currie, T.**, et al., 2004, ApJS, 155, 551
1. “*Radiative Transfer Modeling of Passive Circumstellar Disks: Application to HR 4796A*”, **Currie, T.**, Semenov, D., Henning, Th., Furlan, E., and Herter, T., 2003, PASP, 294, 265

SPIE Proceedings Technical Papers

27. “*High contrast imaging at the photon noise limit with WFS-based PSF calibration*”, Guyon, O., ..., **Currie, T.**, et al., 2022, Proc. SPIE, 12185, 121850E
26. “*Hinkley, S., ...Currie, T.*, et al., 2022, Proc. SPIE, 12180, 121800S,
25. “*Status of the Automated Data Extraction, Processing, and Tracking System (ADEPTS) for CHARIS/SCEXAO*”, Tobin, T., ..., **Currie, T.**, et al., 2022, Proc. SPIE, 12189, 121892C
24. “*Imaged-based adaptive optics wavefront sensor referencing for high contrast imaging*”, Skaf, N., ...**Currie, T.**, Proc. SPIE, 12185, 121851US
23. “*Laboratory demonstrations of EFC and spatial LDPC on Subaru/SCEXAO*”, Ahn, K., ..., **Currie, T.**, Proc. SPIE, 12185, 121852B
22. “*High-Contrast and High Angular Imaging at Subaru Telescope*”, Guyon, O., ...**Currie, T.**, et al., 2022, Proc. SPIE, 12185, 121856J
21. “*High-Contrast Imaging at the Photon Noise Limit with WFS-based PSF Calibration*”, Guyon, O., ...**Currie, T.**, et al., 2022, Proc. SPIE, 12185, 1218560E
20. “*A New Type of Exoplanet Direct Imaging Search: a SCEXAO/CHARIS survey of Accelerating Stars*”, **Currie, T.**, et al., 2021, Proc. SPIE 11823, Techniques and Instrumentation for Detection of Exoplanets X, 1182304
19. “*SCEXAO, a testbed for developing high-contrast imaging technologies for ELTs*”, Ahn, K., ..., **Currie, T.**, et al., 021, Proc. SPIE 11823, Techniques and Instrumentation for Detection of Exoplanets X, 1182303
18. “*Full characterization of the instrumental polarization effects of the spectropolarimetric mode of SCEXAO/CHARIS*”, Joost ‘t Hart, G. J., ..., **Currie, T.**, et al., 2021, Proc. SPIE 11823, Techniques and Instrumentation for Detection of Exoplanets X, 1183300
17. “*High contrast imaging at the photon noise limit with self-calibrating WFS/C systems*”, Guyon, O., ..., **Currie, T.**, et al., 2021, Proc. SPIE 11823, Techniques and Instrumentation for Detection of Exoplanets X, 1182318
16. “*High-contrast integral field spectropolarimetry of planet-forming disks with SCEXAO/CHARIS*”, Lawson,

- K., **Currie, T.**, et al., 2021, Proc. SPIE 11823, Techniques and Instrumentation for Detection of Exoplanets X, 118230D
15. “*On-Sky Performance and Recent Results from the Subaru Coronagraphic Extreme Adaptive Optics System*”, **Currie, T.**, et al., 2020, Proc. SPIE 11448, Astronomical Telescopes and Instrumentation, 114487H
14. “*Calibration of the instrumental polarization effects of SCExAO-CHARIS’ spectropolarimetric mode*”, van Holstein, R., ...**Currie, T.**, et al., 2020, Proc. SPIE 11448, Astronomical Telescopes and Instrumentation, 114475B
13. “*SCExAO: Instrument, testbed and system-level demonstrator for PSI*”, Lozi, J., ...**Currie, T.**, et al., 2020, Proc. SPIE 11448, Astronomical Telescopes and Instrumentation, 114480N
12. “*Validating advanced wavefront control techniques on the SCExAO testbed/instrument*”, Guyon, O., ...**Currie, T.**, et al., 2020, Proc. SPIE 11448, Astronomical Telescopes and Instrumentation, 114481Z
11. “*Focal Plane Wavefront Sensing on SUBARU/SCExAO*”, Vievard, S., ...**Currie, T.**, et al., 2020, Proc. SPIE 11448, Astronomical Telescopes and Instrumentation, 114486D
10. “*The automated data extraction, processing, and tracking system for CHARIS*”, Tobin, T., ...**Currie, T.** et al., 2020, Proc. SPIE 11452, Astronomical Telescopes and Instrumentation, 114521D
9. “*Developing Linear Dark-Field Control for Exoplanet Direct Imaging in the Laboratory and on Ground-based Telescopes*”, **Currie, T.**, et al., 2019, Proc. SPIE 11117, Techniques and Instrumentation for Detection of Exoplanets IX, 1111722
8. “*Shaped pupil coronagraph design for Subaru high-contrast imaging with reduction of the inner working angle for earth-like planet detection*”, Joseph, J., **Currie, T.**, et al., 2019, Proc. SPIE 11117, Techniques and Instrumentation for Detection of Exoplanets IX, 111171I
7. “*Performance and early science with the Subaru Coronagraphic Extreme Adaptive Optics project*”, **Currie, T.**, et al., 2019, Proc. SPIE 11117, Techniques and Instrumentation for Detection of Exoplanets IX, 111170X
6. “*Demonstration of multi-star wavefront control using SCExAO*”, Bendek, E., ..., **Currie, T.**, 2019, Proc. SPIE 11117, Techniques and Instrumentation for Detection of Exoplanets IX, 111170Y
5. “*SCExAO, an instrument with a dual purpose: perform cutting-edge science and develop new technologies*”, Lozi, J., ...**Currie, T.** et al., 2018, Proc. SPIE, 10703, 1070359
4. “*First light of the CHARIS high-contrast integral-field spectrograph*”, Groff, T., ..., **Currie, T.**, et al., 2017, Proc. SPIE, 10400, 1040016
3. “*The SCExAO high contrast imager: transitioning from commissioning to science*”, Jovanovic, N., ..., **Currie, T.**, et al., 2016, Proc. SPIE, 9909, 99090
2. “*GPI PSF Subtraction with TLOCI: The Next Evolution in Exoplanet/Disk High-Contrast Imaging*”, Marois, C., Correia, C., Galicher, R., Ingraham, P., Macintosh, B., **Currie, T.**, De Rosa, R., 2014, Proc. SPIE, 9148, 91480
1. “*MAPLE: reflected light from exoplanets with a 50-cm diameter stratospheric balloon telescope*”, Marois, C., ..., **Currie, T.**, et al. 2014, Proc. SPIE, 9143, 91432

White Papers, Non-Refereed Reviews, and Other Conference Proceedings

23. “*A pathfinder for imaging exo-Earths*”, **Currie, T.**, 2019, Nature Astronomy, 3, 463
22. “*The Planetary Systems Imager for TMT*”, Fitzgerald, M.,... **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
21. “*Imaging Earth-like Exoplanets with a Small Space Telescope*”, Belikov, R.,...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
20. “*MKIDs in the 2020s*”, Mazin, B.,...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
19. “*Cold Debris Disks as Strategic Targets for the 2020s*”, Debes, J.,...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
18. “*Imaging Giant Protoplanets with the ELTs*”, Sallum, S.,**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
17. “*Direct Imaging of Exoplanets in Nearby Multi-Star Systems*”, Belikov, R., ...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
16. “*The Demographics and Atmospheres of Giant Planets with the ELTs*”, Bowler, B., ...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
15. “*The value of astrometry for exoplanet science*”, Bendek, E.,...**Currie, T.**, 2019, Astro2020 Decadal Survey
14. “*Protoplanetary Disk Science Enabled by Extremely Large Telescopes*”, Jang-Condell, H.,...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
13. “*The Early Evolution of Stars and Exoplanet Systems: Exploring and Exploiting Nearby, Young Stars*” Kastner, J.,...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
12. “*New Frontiers for Terrestrial-sized to Neptune-sized Exoplanets In the Era of Extremely Large Telescopes*” Wang, J., ...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
11. “*Observing Planetary Systems in the Making*”, Isella, A., ...**Currie, T.**, et al., 2019, Astro2020 Decadal Survey
10. “*Detecting Earth-like Biosignatures on Rocky Exoplanets around Nearby Stars with Ground-based Extremely*

- Large Telescopes*” Lopez-Morales, M., **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
9. “*The Critical Strategic Importance of Adaptive Optics-Assisted Ground-Based Telescopes for the Success of Future NASA Exoplanet Direct Imaging Missions*”, **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
8. “*Planet formation – The case for large efforts on the computational side*”, Lyra, W., ..., **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
7. “*Directly Imaging Rocky Planets from the Ground*”, Mazin, B., ..., **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
6. “*Modeling Debris Disk Evolution*”, Gaspar, A., ..., **Currie, T.**, et al., 2019, Astro2020 Decadal Survey
5. “*Using Ground-Based Telescopes to Mature Key Technologies and Advance Science for Future NASA Exoplanet Direct Imaging Missions*”, **Currie, T.**, et al., 2018, Exoplanet Science Strategy study of the National Academies of Sciences, Engineering and Medicine
4. “*Clarifying the Status of HD 100546 as Observed by the Gemini Planet Imager*”, **Currie, T.**, et al., 2017, RNAAS, 1, 40
3. “*Imaging And Characterizing Exoplanets (And Disks) With SCExAO: First Results And Future Prospects*”, **Currie, T.**, 2016, Proc. of Resolving planet formation in the era of ALMA and extreme AO. Proceedings of the conference held 16-20 May, 2016 in Santiago, Chile, id.32
2. “*TLOCI: A Fully Loaded Speckle Killing Machine*”, Marois, C., ... **Currie, T.**, 2014, Exploring the Formation and Evolution of Planetary Systems, Proceedings of the International Astronomical Union, IAU Symposium, Volume 299, pp. 48-49
1. “*The Subaru Coronagraphic Extreme Adaptive Optics Imager: First Results and On-Sky Performance*”, **Currie, T.**, et al., 2014, Exploring the Formation and Evolution of Planetary Systems, Proceedings of the International Astronomical Union, IAU Symposium, Volume 299, pp. 34-35