LISTE DE PUBLICATIONS

PRINCIPAUX ARTICLES

- Galicher, R.; Potier, A.; Mazoyer, J. et al. Increasing the raw contrast of VLT/SPHERE with the dark hole technique. III. Broadband reference differential imaging of HR 4796 using a four quadrant phase mask (accepted in A & A)
- 1. Stasevic, S.; Milli, J.; Mazoyer, J. et al. (2023), An inner warp discovered in the disk around HD 110058 using VLT/SPHERE and HST/STIS, Astronomy and Astrophysics, 678, A8, DOI link, arXiv link, 3 citations
- 2. Galicher, R. & Mazoyer, J. (2023), *Imaging exoplanets with coronagraphic instruments*, Comptes Rendus. Physique, Online first, pp. 1-45. DOI link, arXiv link
- 3. Potier, A.; Mazoyer, J.; Wahhaj, Z. et al. (2022), Increasing the raw contrast of VLT/SPHERE with the dark hole technique. II. On-sky wavefront correction and coherent differential imaging, Astronomy and Astrophysics, 665, A136, DOI link, arXiv link, 7 citations
- 4. Chen, C.; Mazoyer, J.; Poteet, C. A. et al. (2020), Multiband GPI Imaging of the HR 4796A Debris Disk, The Astrophysical Journal, 898, 55, DOI link, arXiv link, 34 citations
- 5. Mazoyer, J.; Pueyo, L.; N'Diaye, M. et al. (2018), Active Correction of Aperture Discontinuities-Optimized Stroke Minimization. II. Optimization for Future Missions, The Astronomical Journal, 155, 8, DOI link, arXiv link, 22 citations
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- 9. Mazoyer, J.; Boccaletti, A.; Choquet, É. et al. (2016), A Symmetric Inner Cavity in the HD 141569A Circumstellar Disk, The Astrophysical Journal, 818, 150, DOI link, arXiv link, 13 citations
- 10. **Mazoyer, J.**; Boccaletti, A.; Augereau, J.-C. et al. (2014), Is the HD 15115 inner disk really asymmetrical?, Astronomy and Astrophysics, 569, A29, DOI link, arXiv link, 33 citations
- 11. **Mazoyer**, J.; Baudoz, P.; Galicher, R. et al. (2014), *High-contrast imaging in polychromatic light with the self-coherent camera*, Astronomy and Astrophysics, 564, L1, DOI link, arXiv link, 32 citations
- 12. Mazoyer, J.; Baudoz, P.; Galicher, R. et al. (2013), Estimation and correction of wavefront aberrations using the self-coherent camera: laboratory results, Astronomy and Astrophysics, 557, A9, DOI link, arXiv link, 33 citations

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- 1. Hom, J.; Patience, J.; Chen, C. H. et al. (2024), A uniform analysis of debris discs with the Gemini Planet Imager II: constraints on dust density distribution using empirically informed scattering phase functions, Monthly Notices of the Royal Astronomical Society, 528, 6959, DOI link, arXiv link
- 2. Sallum, S.; Ray, S.; Kammerer, J. et al. (2024), The JWST Early Release Science Program for Direct Observations of Exoplanetary Systems. IV. NIRISS Aperture Masking Interferometry Performance and Lessons Learned, The Astrophysical Journal, 963, L2, DOI link, arXiv link, 1 citation
- 3. Worthen, K.; Chen, C. H.; Brittain, S. D. et al. (2024), Vertical Structure of Gas and Dust in Four Debris Disks, The Astrophysical Journal, 962, 166, DOI link, arXiv link
- 4. Crotts, K. A.; Matthews, B. C.; Duchêne, G. et al. (2024), A Uniform Analysis of Debris Disks with the Gemini Planet Imager. I. An Empirical Search for Perturbations from Planetary Companions in Polarized Light Images, The Astrophysical Journal, 961, 245, DOI link, arXiv link, 2 citations
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- 8. Hinkley, S.; Carter, A. L.; Ray, S. et al. (2022), The JWST Early Release Science Program for the Direct Imaging and Spectroscopy of Exoplanetary Systems, Publications of the Astronomical Society of the Pacific, 134, 095003, DOI link, arXiv link, 35 citations
- 9. Crotts, K. A.; Draper, Z. H.; Matthews, B. C. et al. (2022), A Multiwavelength Study of the Highly Asymmetrical Debris Disk around HD 111520, The Astrophysical Journal, 932, 23, DOI link, arXiv link, 4 citations
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- 14. Esposito, T. M.; Kalas, P.; Fitzgerald, M. P. et al. (2020), Debris Disk Results from the Gemini Planet Imager Exoplanet Survey's Polarimetric Imaging Campaign, The Astronomical Journal, 160, 24, DOI link, arXiv link, 75 citations
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- 24. Leboulleux, L.; Sauvage, J.-F.; Pueyo, L. A. et al. (2018), Pair-based Analytical model for Segmented Telescopes Imaging from Space for sensitivity analysis, Journal of Astronomical Telescopes, Instruments, and Systems, 4, 035002, DOI link, arXiv link, 18 citations
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- 28. Delorme, J. R.; Galicher, R.; Baudoz, P. et al. (2016), Focal plane wavefront sensor achromatization: The multireference self-coherent camera, Astronomy and Astrophysics, 588, A136, DOI link, arXiv link, 16 citations
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- 31. Wiens, R. C.; Maurice, S.; Lasue, J. et al. (2013), Pre-flight calibration and initial data processing for the ChemCam laser-induced breakdown spectroscopy instrument on the Mars Science Laboratory rover, Spectrochimica Acta, 82, 1, DOI link, 230 citations
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- 2. Mazoyer, J.; Arriaga, P.; Hom, J. et al. (2020), DiskFM: A forward modeling tool for disk analysis with coronagraphic instruments, Ground-based and Airborne Instrumentation for Astronomy VIII, 11447, 1144759, DOI link, arXiv link, 6 citations
- 3. Fogarty, K.; Mazoyer, J.; St. Laurent, K. et al. (2018), Optimal deformable mirror and pupil apodization combinations for apodized pupil Lyot coronagraphs with obstructed pupils, Space Telescopes and Instrumentation 2018: Optical, Infrared, and Millimeter Wave, 10698, 106981J, DOI link, 2 citations
- 4. Ruane, G.; Riggs, A.; Mazoyer, J. et al. (2018), Review of high-contrast imaging systems for current and future ground- and space-based telescopes I: coronagraph design methods and optical performance metrics, Space Telescopes and Instrumentation 2018: Optical, Infrared, and Millimeter Wave, 10698, 106982S, DOI link, arXiv link, 12 citations
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- 6. Mazoyer, J. & Pueyo, L. (2017), Fundamental limits to high-contrast wavefront control, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 10400, 1040014, DOI link, arXiv link, 2 citations
- 7. Leboulleux, L.; N'Diaye, M.; **Mazoyer, J.** et al. (2017), Comparison of wavefront control algorithms and first results on the high-contrast imager for complex aperture telescopes (hicat) testbed, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 10562, 105622Z, DOI link
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- 12. Mazoyer, J.; Galicher, R.; Baudoz, P. et al. (2014), Deformable mirror interferometric analysis for the direct imagery of exoplanets, Adaptive Optics Systems IV, 9148, 914846, DOI link, arXiv link, 1 citation
- 13. Mazoyer, J.; Baudoz, P.; Galicher, R. et al. (2013), Direct detection of exoplanets in polychromatic light with a Self-coherent camera, Proceedings of the Third AO4ELT Conference, 97, DOI link
- 14. Baudoz, P.; Mazoyer, J.; Galicher, R. (2013), Laboratory tests of planet signal extraction in high contrast images, Proceedings of the Third AO4ELT Conference, 109, DOI link, 2 citations
- 15. Mazoyer, J.; Galicher, R.; Baudoz, P. et al. (2013), Speckle correction in polychromatic light with the self-coherent camera for the direct detection of exoplanets, Techniques and Instrumentation for Detection of Exoplanets VI, 8864, 88640N, DOI link, arXiv link, 1 citation
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- 17. Baudoz, P.; Mazoyer, J.; Mas, M. et al. (2012), Dark hole and planet detection: laboratory results using the self-coherent camera, Ground-based and Airborne Instrumentation for Astronomy IV, 8446, 84468C, DOI link, 11 citations
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- 3. Desai, N.; König, L.; Por, E. et al. (2023), Integrated photonic-based coronagraphic systems for future space telescopes, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 12680, 126801S, DOI link, arXiv link
- 4. Cantalloube, F.; Christiaens, V.; Cantero, C. et al. (2022), Exoplanet imaging data challenge, phase II: characterization of exoplanet signals in high-contrast images, Adaptive Optics Systems VIII, 12185, 1218505, DOI link, arXiv link, 1 citation
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- 8. N'Diaye, M.; Fogarty, K.; Soummer, R. et al. (2018), Apodized Pupil Lyot coronagraphs with arbitrary aperture telescopes: novel designs using hybrid focal plane masks, Space Telescopes and Instrumentation 2018: Optical, Infrared, and Millimeter Wave, 10698, 106986A, DOI link, arXiv link, 2 citations
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- 14. Egron, S.; Soummer, R.; Lajoie, C.-P. et al. (2017), James Webb Space Telescope optical simulation testbed IV: linear control alignment of the primary segmented mirror, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 10398, 1039811, DOI link
- 15. Pueyo, L.; Zimmerman, N.; Bolcar, M. et al. (2017), The LUVOIR architecture "A" coronagraph instrument, Society of Photo-Optical Instrumentation Engineers (SPIE) Conference Series, 10398, 103980F, DOI link, 10 citations
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- 17. Galicher, R.; Baudoz, P.; Delorme, J. R. et al. (2014), *High contrast imaging on the THD bench: progress and upgrades*, Space Telescopes and Instrumentation 2014: Optical, Infrared, and Millimeter Wave, 9143, 91435A, DOI link, 3 citations
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- Mazoyer, J. et al. (2019), High-Contrast Testbeds for Future Space-Based Direct Imaging Exoplanet Missions, Bulletin of the American Astronomical Society, 51, 101, arXiv:1907.09508

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• Mazoyer, J. (2014), Haut contraste pour l'imagerie directe d'exoplanètes et de disques : de la self-coherent camera à l'analyse de données NICI, Ph.D. Thesis, DOI link, 2 citations