
ExoPlanet News

An Electronic Newsletter

No. 206, 18 August 2026

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1 Editorial

Welcome to Edition 206 of ExoPlanet News!

As usual, we bring you abstracts of scientific papers, job ads, conference announcements, and an overview of exoplanet-related articles on astro-ph. Thanks a lot to all of you who contributed to this issue of the newsletter!

For next month, we continue looking forward to your paper abstracts, job ads or meeting announcements. Also, special announcements are welcome. As always, we would also be happy to receive feedback concerning the newsletter. The $\LaTeX$ template (v2.0) for submitting contributions, as well as all previous editions of ExoPlanet News, can be found on the ExoPlanet News webpage (<https://nccr-planets.ch/exoplanetnews/>).

The next issue will appear on Tuesday, September 8th (with a submission deadline ending on Sunday, September 6th, 2026 CEST).

Jeanne Davoult
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2 Abstracts of refereed papers

Circular polarization as a probe of cloud properties and asymmetries in giant exoplanet atmospheres

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Astronomy & Astrophysics, in press, arXiv:2608.04837

Polarimetry is a promising method for characterizing clouds in exoplanetary atmospheres. For planets in the Solar System, circular polarization measurements complement linear polarimetry by providing additional information on cloud particle properties. As the disk-integrated circular polarization is zero for symmetric planets, observing intrinsic circular polarization of spatially unresolved exoplanets requires stable spatial asymmetries such as circumplanetary rings. We investigated the potential of circular polarization measurements at optical and near-infrared wavelengths to determine optical properties of cloud particles in the atmospheres of giant exoplanets and characterize asymmetries. For 20 selected cloud condensates that cover a large range of refractive indices, we calculated optical properties assuming Mie scattering theory. The circular polarization of starlight scattered by cloudy exoplanets was calculated with Monte Carlo radiative transfer simulations. To explain the connection between optical properties and planetary circular polarization, we derived an interpretative model of the first two scattering orders. Planetary hemispheres with atmospheres including cloud particles with a large imaginary part, k , of the refractive index show distinct circular polarization phase curves dominated by scattering first by gaseous molecules and then by cloud particles. The intrinsic degree of circular polarization, P_c , is at most $3 \cdot 10^{-4}$. When the cloud particles have a low k , they instead induce even smaller but more predictable circular polarization dominated by scattering solely by cloud particles. The predictability allows for a characterization of the underlying asymmetry. For example, this could be used to determine which half of the planet is covered by a circumplanetary ring. Circular polarization of starlight reflected by giant exoplanets is sensitive to cloud particle composition and large-scale asymmetries but remains a subtle signal. While promising for characterizing clouds under favorable conditions, practical detection requires technological advances in polarimetry and careful disentanglement from stellar background signals.

Download/Website: <https://arxiv.org/abs/2608.04837>

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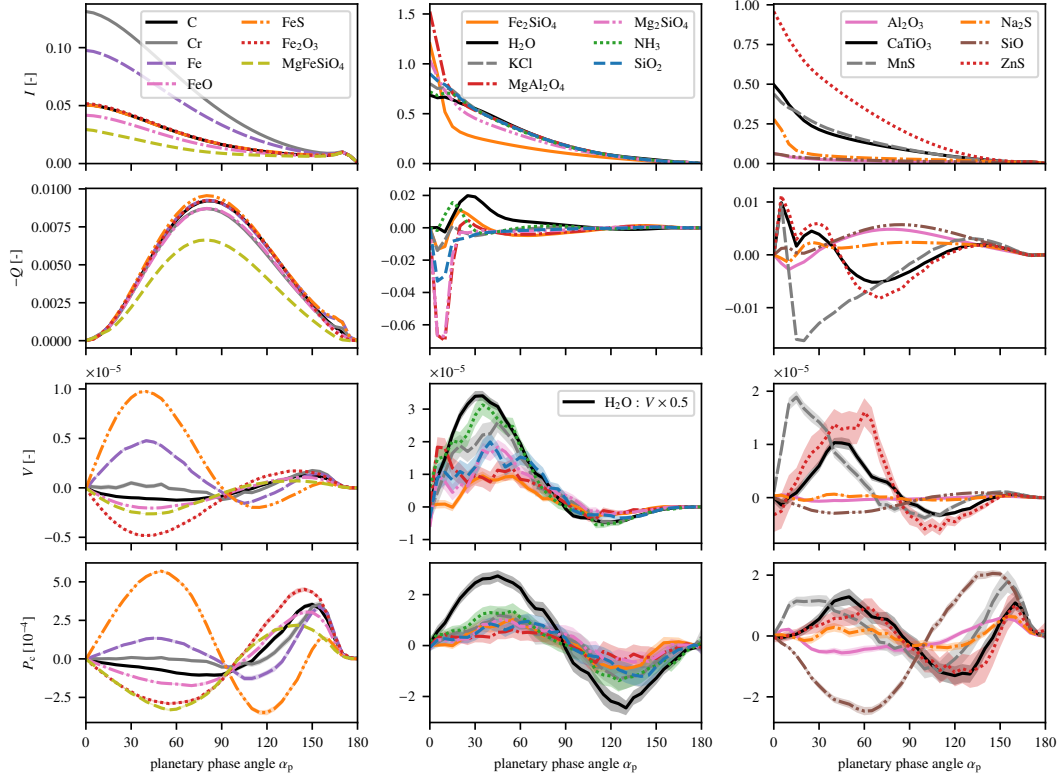


Figure 1: First row: Planetary intensity phase curve at a wavelength of 0.5 μm, normalized such that $I(0^\circ)$ is equal to the geometric albedo. Second row: Linearly polarized intensity, $-Q$, as a function of the planetary phase angle, α_p , at a wavelength of 0.5 μm. The sign is chosen to facilitate comparisons with the signed degree of linear polarization, $-Q/I$. Third row: Circularly polarized intensity, V , of the hemisphere above the planetary scattering plane as a function of α_p at a wavelength of 0.5 μm. The statistical error of POLARIS simulations using 10^{10} photon packages is shown as an error band. For water, V was multiplied by 0.5 to facilitate the visibility of features for the other materials. Fourth row: Circular polarization, P_c , as a function of α_p of the hemisphere above the planetary scattering plane. Left column: Materials with a high imaginary part, k , of the refractive index. Central column: Materials with $k < 0.01$ and various real parts. Right column: Materials with a variable k between 0.3 μm and 1.0 μm.

Reading between the rings: observed dust ring properties as probes of planet masses

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The Astrophysical Journal, published (2026ApJ..1003..215F)

We hypothesise that dust rings in protoplanetary discs formed by an embedded planet should have properties that reflect the planet's mass. We use 2D hydrodynamical simulations of planet-disc interactions to investigate this, focusing on planets ranging $0.5 - 2.0\times$ the pebble-isolation mass, for three different aspect ratios. We find the ring's dust mass, peak location, and width to correlate with planet mass. We confirm a positive linear relationship between a planet's Hill radius and the location of a ring's density peak and demonstrate how this relationship can be used to constrain planet masses in observed systems by applying it to PDS 70. The dust ring width and mass change with planet mass for planet masses up to the pebble-isolation mass, beyond which they become constant. The steepness of the gas pressure radial profile is asymmetric, with the direction of the asymmetry being determined by whether the planet mass is above or below the pebble-isolation mass. We therefore propose a new way to define the pebble-isolation mass: the minimum planet mass which perturbs the gas enough for the pressure gradient interior to the pressure maximum to exceed the pressure gradient exterior to it. We discuss how our findings could be used to constrain or estimate planet masses from gas or dust observations of discs with measurable substructures and apply our results to 5 discs in the exoALMA sample to estimate planet masses and constrain disc aspect ratios. We also discuss how the potential for planetesimal formation in a ring varies with planet mass.

Download/Website: <https://iopscience.iop.org/article/10.3847/1538-4357/ae6272>

Press release: <https://warwick.ac.uk/news/pressreleases/weighing-newborn-planets/>

Contact: amena.faruqi@warwick.ac.uk

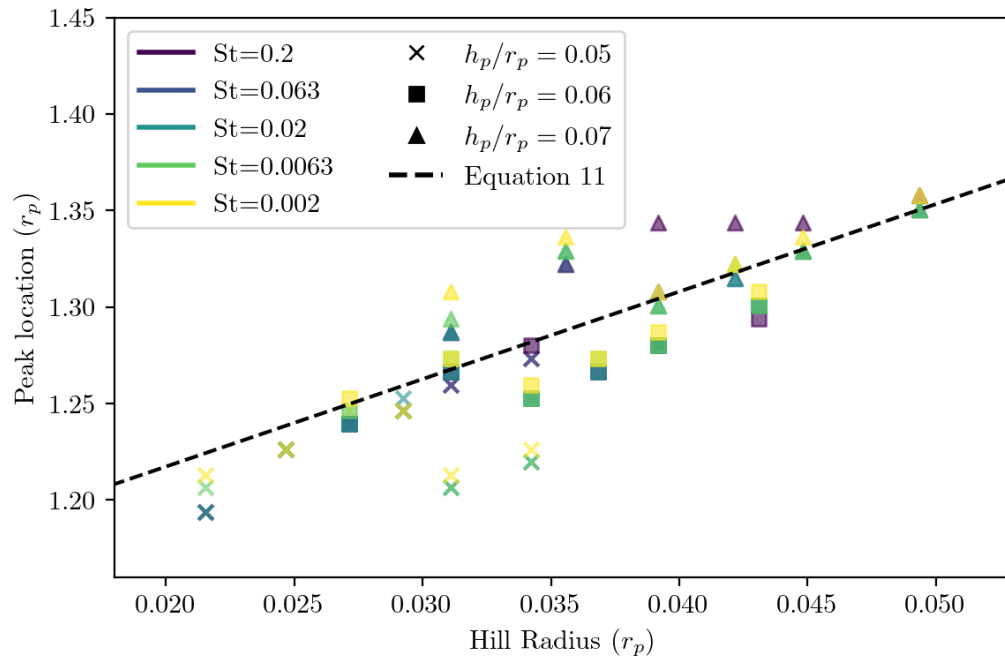


Figure 2: Relationship between the planet's Hill radius and the location of a dust ring peak, as a function of Stokes number. We find a linear relationship between a planet's Hill radius and the location of the ring peak, which is independent of Stokes number.

3 Exoplanet Archives

July 2026 Updates at the NASA Exoplanet Archive

The NASA Exoplanet Archive team

Caltech/IPAC-NASA Exoplanet Science Institute, MC 100-22 Pasadena CA 91125

Pasadena CA USA, August 10, 2026

Note: Unless otherwise noted, all planetary and stellar data mentioned in the news are in the Planetary Systems Table, which provides a single location for all self-consistent planetary solutions, and its companion table the Planetary Systems Composite Parameters, which offers a more complete table of parameters combined from multiple references and calculations. Links to other tables and System Overview pages are embedded in the news text.

July 30, 2026

Nine New Planets, Including TESS's First Microlensing Planet

This week's new planets feature Gaia23braL b, the first microlensing planet confirmed by NASA's TESS. Its discovery in TESS data was made possible after ESA's Gaia telescope flagged the initial microlensing event. Learn more in the NASA media release and the discovery paper.

The other new planets are Gliese 48 b, HAT-P-47 b, NGTS-39 b, TOI-2040 b, TOI-2049 b, TOI-2578 b, TOI-4427 b, and TOI-4458 b. There are also new data for HD 3167 b, c, d, & e, TOI-260, TOI-20040 A b, TOI-2134 b & c, WASP-156 b, and YSES-1 b.

We've also added 55 new atmospheric spectra for 34 planets to the Atmospheric Spectroscopy Table.

July 16, 2026

Five New Planets, Including Two of the Least-Dense Planets Ever Found

This week's new planets include TOI-791 b & c, two Jupiter-sized planets with densities so light they're compared to cotton candy. They're also considered to be among the puffiest worlds found to date! Learn more about these rare discoveries in the NASA media release and the discovery paper.

The other new planets are TOI-1533 b & c and TOI-6884 b. There are also new data for HD 15337 c, HIP 41378 b, c, d, e, f, & g, K2-93 b, c, d, e, f, & g, KELT-9 b, LHS 3844 b, WASP-43 b, WASP-100 b, and WASP-121 b.

A new Hubble transmission spectrum captures AU Mic b's atmosphere escaping in sudden, intermittent bursts due to its terrifying host star. These wild system dynamics were previously immortalized in NASA's spooky "Flares of Fury" poster and video. The other planets with new spectra in the Atmospheric Spectroscopy Table are HAT-P-30 b, HD 15337 c, LHS 3844 b, WASP-43 b, WASP-100 b, and WASP-121 b.

July 9, 2026

Four Planets Added, Including a Third Discovery in the Beta Pictoris System

This week's update delivers data for 18 planets, highlighted by four new discoveries—including a third planet in the Beta Pictoris system. Simultaneously announced by Suttler et al. (2026) and Gibbs et al. (2026), the discovery

of bet Pic d makes Beta Pictoris only the second directly imaged system known to host more than two confirmed planets.

The other new planets are NGTS-38 b, TOI-2147 b, and TOI-6019 b. The planets with new parameters are eps Ind A b, GJ 367 b, HAT-P-5 b, HAT-P-32 A b, HAT-P-38 b, K2-25 b, Kepler-79 d, LHS 1140 b, TOI-1272 b, TOI-1694 b & c, WASP-7 b, WASP-72 b, and WASP-127 b.

We've also updated the status of TOI-1272 c to False Positive Planet (FPP) based on a published refutation. The object's data have been removed from the Planetary Systems tables, but remain on the TOI-1272 System Overview page.

There are also new spectra for 21 planets added to the Atmospheric Spectroscopy Table: HAT-P-5 b, HAT-P-6 b, HAT-P-32 A b, HAT-P-38 b, HD 189733 b, HD 209458 b, K2-25 b, Kepler-79 d, KELT-1 b, KELT-3 b, KELT-9 b, eps Ind A b, LHS 1140 b, WASP-3 b, WASP-7 b, WASP-19 b, WASP-62 b, WASP-72 b, WASP-121 b, WASP-121 b, WASP-127 b, WASP-127 b, and XO-3 b.

July 2, 2026

A Plethora of Planet Data and Spectra

This week's update features 19 new planets, 48 new spectra (including seven of the TRAPPIST-1 planets!), and new data for 11 planets. One planet has also been demoted as a false positive.

New Planets and Data

This week's new planets are HD 125136 b, HD 126105 b, HD 127195 b & c, HD 190360 d, HIP 8923 b, HIP 10090 b & c, HIP 39330 b, HIP 98599 b, KMT-2023-BLG-0332L b, KMT-2023-BLG-1592L b, OGLE-2023-BLG-0766L b, TOI-3664 b, TOI-4034 b, TOI-6564 b, TIC 150070085 b, TIC 52059926 b, and TIC 9344899 b.

New data have also been added for 51 Peg b, eps Eri b, HAT-P-11 b, HD 190360 b & c, HIP 21850 b & c, TOI-199 b, TOI-1710 b, TOI-1883 b, TOI-4602.01, WASP-18 b, and WD 0806-661 b.

We have also updated the status of WASP-18 c to False Positive Planet (FPP) based on a published refutation. The object's data have been removed from the Planetary Systems tables, but remain on the WASP-18 System Overview page.

New Transmission and Eclipse Spectra

Seven of this week's 48 new spectra are of six planets in the TRAPPIST-1 system, all taken by NASA's Hubble Space Telescope. The planets with new spectra are: HAT-P-11 b, HD 149026 b, HD 189733 b, HD 209458 b, HD 80606 b, KELT-16 b, MASCARA-1 b, Qatar-1 b, TOI-199 b, TRAPPIST-1 b, c, d, e, f, & g, WASP-12 b, WASP-127 b, WASP-33 b, WASP-43 b, WASP-52 b, WASP-94 A b, and WASP-121 b.

You can find the new spectra by browsing the Atmospheric Spectroscopy Table, or get a pre-filtered table for a specific target by going to its System Overview page, clicking on the planet's Planetary Parameters section, and then clicking the Atmospheric Spectroscopy link under Tools.)

But Wait, There's More!

We've also added another archive video tutorial that walks you through the new Published Data Upload service. Check it out on our YouTube channel—as well as the other videos in the playlist—and let us know what you think! We'd also love to hear your ideas for other instructional videos about the archive.

Download/Website: <https://exoplanetarchive.ipac.caltech.edu>

Contact: mharbut@caltech.edu

4 As seen on astro-ph

The following list contains exoplanet related entries appearing on astro-ph in July 2026.

Disclaimer: The hyperlinks to the astro-ph articles are provided for the convenience of the reader, but the ExoPlanet News cannot be responsible for their accuracy and perpetuity.

July 2026

- astro-ph/2607.00080: **White dwarf planets in star clusters: gravitational scattering versus mass-loss effects** by *Richard J. Parker, Dimitri Veras*
- astro-ph/2607.00092: **Planet formation in chemically diverse and evolving discs II. Chemical fingerprints in planetary atmospheres** by *E. Pacetti et al.*
- astro-ph/2607.01168: **Stellar Forcing of (exo)Planetary Environments** by *Julián D. Alvarado-Gómez et al.*
- astro-ph/2607.01466: **How Late Solid Enrichment Shapes Atmospheric Abundances in Giant Planets** by *Michael L. Balogh et al.*
- astro-ph/2607.00950: **The Mid-Infrared Transmission Spectrum of the Temperate Sub-Neptune TOI-270 d** by *Måns Holmberg et al.*
- astro-ph/2607.01853: **TESS's First Bound Microlensing Planet: A Binary Microlensing Event Revealing a Planetary Companion toward the Galactic Plane** by *Mallory Harris et al.*
- astro-ph/2607.02065: **Quantum-optimal coronagraphy with spatial mode sorting for direct exoplanet observations** by *Yinzi Xin et al.*
- astro-ph/2607.02653: **Contribution of White Dwarf Formation Kicks to the Free-Floating Planet Population** by *Alexander P. Stephan, Keivan G. Stassun*
- astro-ph/2607.02660: **Azimuthal brightness modulation reveals hidden rings in CI Tau** by *C. E. Scardoni et al.*
- astro-ph/2607.02685: **The Longest-period Young Transiting Exoplanets. A Duo of Puffy Giants inside a Debris Disk** by *Carlos del Burgo et al.*
- astro-ph/2607.02691: **Multistage Rocket Optimization, Geophysics, and the Spacefaring Envelope of Habitable Super-Earths** by *Sanjoy M. Som*
- astro-ph/2607.02833: **Uniform Metallicity Measurements of M Dwarf Planet Hosts Support Metallicity-Dependent Sub-Neptune Formation** by *Emma V. Turtelboom et al.*
- astro-ph/2607.03133: **Radio emission from star-planet interactions** by *H. K. Vedantham et al.*
- astro-ph/2607.03467: **The influence of composition gradients on giant planet radii** by *Henrik Knierim, Ravit Helled*
- astro-ph/2607.03866: **Interpreting ALMA Multiwavelength Continuum Observations of PDS 70 c: An Optically Thick Dust Ring in the Circumplanetary Disk** by *Yuhito Shibaike et al.*
- astro-ph/2607.03874: **Star Planet Interactions** by *Arghyadeep Paul et al.*
- astro-ph/2607.04275: **Assessing the Impact of Varying HSO Cross Sections on Photochemical Models: Implications for the Spectral Characterization of Terrestrial Exoplanets** by *Alexandre Branco et al.*
- astro-ph/2607.05193: **Planetary-Mass Exosatellite Detected Around the Substellar Companion of a Star** by *Kevin Hoy et al.*
- astro-ph/2607.05497: **Puffed-up Edges of Planet-opened Gaps in Protoplanetary Disks. II. The Role of the Planet's Orbital Eccentricity** by *Jiaqing Bi, Min-Kai Lin*
- astro-ph/2607.06491: **A parameterised approach to disequilibrium retrievals in the JWST era: Application to NIRCcam observations of HD 189733b** by *Jake Taylor et al.*
- astro-ph/2607.06684: **Extreme Debris Disks: Insights into Violent Collisions in Planet Formation and Destruction** by *Kate Y. L. Su et al.*
- astro-ph/2607.06708: **Mitigating Charge Migration in JWST NIRISS Reveals That KELT-7 b is a Metal-enriched Ultra-hot Jupiter Orbiting a Young Metal-rich Star** by *Stephen P. Schmidt et al.*
- astro-ph/2607.06809: **"Perfect" spectra for ESO's HARPS spectrograph** by *Dinko Milaković et al.*

- astro-ph/2607.06857: **Climates of temperate rocky planets with He-dominated atmospheres** by Viviane Kuss *et al.*
- astro-ph/2607.06931: **Exoplanet Detection Using Adaptive Quantum-Optimal Measurement** by Hyunsoo Choi *et al.*
- astro-ph/2607.07746: **Space and Lunar Interferometry: Emerging Concepts and Pathways** by Gioia Rau
- astro-ph/2607.07571: **Ionized gas emission in protoplanetary disks with the SKAO** by Greta Guidi *et al.*
- astro-ph/2607.07704: **Radio emission from close-in exoplanets: Can we extend the radio-magnetic scaling law to the sub-Alfvénic stellar wind regime?** by Filip Elekes, Aline A. Vidotto
- astro-ph/2607.07787: **Probing the origins. III. Exoplanet demographics across Galactic birth radii** by Juan José García-Delgado *et al.*
- astro-ph/2607.08910: **Tentative detection of circularly polarized bursty radio emissions from the HD 189733 exoplanetary system using NenuFAR beamformed observations** by Jake D. Turner *et al.*
- astro-ph/2607.08263: **A search for circumstellar gas in pre-main-sequence debris discs using absorption spectroscopy** by Karolina M. Szewczyk *et al.*
- astro-ph/2607.08750: **Debris Disc Substructures Induced by Secular Planetary Perturbations** by Roman R. Rafikov *et al.*
- astro-ph/2607.08701: **The Impact of Planetary Phase Functions on Exo-Earth Detectability with EXOSIMS** by Searra Foote *et al.*
- astro-ph/2607.08050: **RedDots: Magnetic field of the nearby active M dwarf GJ 729, and a search for companions** by E. L. Brown *et al.*
- astro-ph/2607.08026: **A Retrieval Framework for Observationally Constraining the Parameters of Circumplanetary Disks** by Aster Taylor, Fred Adams
- astro-ph/2607.08132: **Vetting Ambiguous Planetary Candidates (APC) in TESS Data: Insights from LATTE Package and Detection of Nine Potential Exoplanet Candidates** by Umer Hameed Khan *et al.*
- astro-ph/2607.09407: **JWST Edge-on Disk Ice (JEDIce): Vibrationally hot, rotationally cold H₂ in the outer disk of Oph 163131 non-thermally excited by UV and cosmic rays** by Korash Assani *et al.*
- astro-ph/2607.09451: **Companion Architectures of Sub-Saturns: Distinct Migration Pathways Across the Neptunian Landscape** by Luis Thomas *et al.*
- astro-ph/2607.09656: **HD 148797: A bright F-type star with two moderate-period low-density sub-Jovian planets. Compact multi-planet architectures are common in the Neptunian savanna** by J. M. Almenara *et al.*
- astro-ph/2607.09873: **How Many Transiting Giant Planets Can JWST Search for Moons and Rotational Oblateness?** by Le-Chris Wang, Joshua N. Winn
- astro-ph/2607.10175: **Parameter estimation from the transit light curve including gravitational lensing effects** by Shinta Kasuya *et al.*
- astro-ph/2607.10888: **Stellar Observation Scheduling Optimization for Distributed Space Interferometry Missions** by Ethan Foss *et al.*
- astro-ph/2607.12088: **TESS Photometry and Radial Velocity Analysis of the sub-Neptune Exoplanet π Mensae c and the Wider π Mensae Planetary System** by Skylar S. Larsen *et al.*
- astro-ph/2607.12017: **Biosignature detectability on transiting habitable worlds with ELT/ANDES** by E. Kurzawa-Ferrandez *et al.*
- astro-ph/2607.12005: **Probing the Innermost Region of the V883 Ori Disk Using ALMA Band 1 Methanol Line Observations** by Yoshihide Yamato *et al.*
- astro-ph/2607.12007: **Modeling the Evolution of Protoplanetary Disks: Two Pathways from Gravitational Instability to MHD Wind-Driven Accretion** by Yang Ni *et al.*
- astro-ph/2607.11841: **Ice Deposition Fronts In Porous Bodies From Transient Heating Events In a Protoplanetary Disk** by Stephen Li *et al.*
- astro-ph/2607.11677: **Water gas discs in exo-asteroid belts** by Paul Huet *et al.*
- astro-ph/2607.11642: **Latitudinal chemical and cloud variations in the atmosphere of a brown dwarf** by Ben-

- jamin Charnay et al.*
- astro-ph/2607.11599: **Peering through the disc of HD 98800 BaBb. Precise timing predictions for the HD 98800 AaAb occultation** by *S. Zúñiga-Fernández et al.*
- astro-ph/2607.11531: **Evolution and Observable Properties of Rocky Planet Atmospheres** by *Marie-Luise Steinmeyer et al.*
- astro-ph/2607.11507: **Discovering and Characterising Exoplanets and Ultracool Dwarfs with the Square Kilometre Array** by *Robert D. Kavanagh et al.*
- astro-ph/2607.11728: **Modeling the Impact of Starspot Inhomogeneity on Spectroscopic Retrievals of Directly-Imaged Planets** by *Alex R. Howe et al.*
- astro-ph/2607.13255: **Piercing through the Haze: Characterizing Titan-like terrestrial exoplanets with JWST** by *L. C. Mayorga et al.*
- astro-ph/2607.13227: **Growing Planets Produce Extreme Dust Signatures** by *Philip J. Carter, Zoë M. Leinhardt*
- astro-ph/2607.13167: **Probing Planet Formation with JWST Spectroscopy of IC348: Sustained Diversity but Limited Chemical Evolution and Pebble Drift** by *John S. Carr, Joan R. Najita*
- astro-ph/2607.12618: **Direct Retrieval of Protoplanetary Disk Dust Properties using Auto-differentiable Gaussian Processes and Its Application to the HD 169142 Disk** by *Tomohiro C. Yoshida et al.*
- astro-ph/2607.12483: **A Fast Concentric-disk Contour Integration Method For Microlensing Limb-darkening Effect** by *Suwei Wang*
- astro-ph/2607.13133: **Photometric Variability and Rotation of Beta Pictoris b from JWST NIRCам Coronagraphic Imaging** by *Yifan Zhou et al.*
- astro-ph/2607.13545: **SaNDi-SHoP: Searching for Satellites'N'Disks with a Star-Hopping Program II. Spectrophotometric analysis and orbital monitoring of directly imaged companions** by *Andrea Bernardi et al.*
- astro-ph/2607.13740: **GRACE-DG: A Discontinuous Galerkin Method-Based Code for General Nonlinear Coagulation-Fragmentation Equations** by *Jing Yang et al.*
- astro-ph/2607.14225: **The Expected Yield of Venus Zone Terrestrial Planets from PLATO** by *Stephen R. Kane et al.*
- astro-ph/2607.14251: **First planetesimals from DESI DR1: 12 highly metal-rich white dwarfs** by *Paula Izquierdo et al.*
- astro-ph/2607.14294: **Preferential alignment of Class 0, Class I protostellar disks in multiple systems across nine nearby molecular clouds** by *Cheng-Han Hsieh et al.*
- astro-ph/2607.14323: **Tidal evolution of packed moon systems around an Earth-mass planet** by *Alan Briseño et al.*
- astro-ph/2607.14326: **Helium escaping from the atmosphere of a nearby rocky exoplanet orbiting in a habitable zone** by *Collin Cherubim et al.*
- astro-ph/2607.14329: **The exozodi spectral effect: Residual habitable zone dust may bias exoEarth characterization** by *Miles H. Currie et al.*
- astro-ph/2607.15391: **Ephemeris Refinement for Qatar-4 b, HAT-P-18 b, and CoRoT-1 b with Small Telescope and TESS Observations** by *Heather B. Hewitt et al.*
- astro-ph/2607.15204: **Sulfur photochemistry observationally traces mantle redox states of rocky planets** by *Ioannis Panagiotou et al.*
- astro-ph/2607.15144: **The majority of hot Jupiters formed beyond the water ice line** by *Yaxing He et al.*
- astro-ph/2607.14772: **DUET: Design of a simultaneous InGaAs-CCD split-beam imager for ultra-cool dwarf exoplanet transit survey** by *Peter P. Pedersen et al.*
- astro-ph/2607.14850: **Dust masses of Upper Scorpius disks and their statistics** by *Huiyi Deng et al.*
- astro-ph/2607.14788: **Dust Growth in Binary Systems: Inhibition of dust settling and growth in circumbinary discs** by *Antoine Alaguero et al.*
- astro-ph/2607.15011: **Atmospheric evolution through outgassing and escape on young molten rocky exoplanets** by *Emma Postolec et al.*

- astro-ph/2607.15521: **Silicate Clouds, SiO, and Molecular Trends across the L-T Sequence: A JWST/MIRI LRS Spectral Library of Brown Dwarfs** by *Sam Barber et al.*
- astro-ph/2607.15923: **Extending dynamical mass measurements: probing GI as a possible origin of mm-dust spirals** by *V. Pezzotta et al.*
- astro-ph/2607.16691: **Distribution of Chemically-Processed Dust in a Viscously Evolving Protoplanetary Disk: Application to Crystalline Silicates in Comets** by *Lily Ishizaki et al.*
- astro-ph/2607.17648: **Probing disk dynamics and dust evolution through shadows in protoplanetary disks: A case study of the HD 142527 disk** by *Yuya Fukuhara et al.*
- astro-ph/2607.18193: **A Self-Consistent 3D Hydrodynamic Model for Helium Transit Signatures in Evaporating Hot Jupiters** by *Anselmo Falorca, Aline Vidotto*
- astro-ph/2607.18370: **Late-infall-induced formation of giant planets, multi-generational planetesimals, and disk substructures** by *Haichen Zhao et al.*
- astro-ph/2607.18409: **Precise Determination of the Metallicity and C/O of WASP-39 b From a Single JWST Instrument Mode with Phase-Resolved Cross-Correlation Retrievals** by *Arjun B. Savel et al.*
- astro-ph/2607.18523: **Chondrite Parent Bodies as Escaped Satellites of Proto-Planetary Embryos** by *Harold F. Levison et al.*
- astro-ph/2607.19632: **Dynamically Selected Mass-Radius Relationship for Low Mass Exoplanets** by *Brad Hansen, Austin Mao*
- astro-ph/2607.19579: **Atmospheric retrieval evidence for water isotopologue HDO on exoplanet WASP-39b** by *Fabian Gruebel et al.*
- astro-ph/2607.19118: **Dynamical formation of long-period exoplanets systems in evolving binary stars** by *Isabel J. Lima et al.*
- astro-ph/2607.19325: **Refined parameters, formation, and dynamical stability of the wild exoplanet system K2-312=HD 80653** by *L. Naponiello et al.*
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