ExoPlanet News
An Electronic Newsletter

No. 201, 10 March 2026

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Contents

1 Editorial

Welcome to Edition 201 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, April 14th (with a submission deadline ending on Sunday, April 12th, 2026 CET).

Jeanne Davoult
Leander Schlarmann
Haiyang Wang
Timm-Emanuel Riesen

2 Abstracts of refereed papers

Predicting Gaia astrometry's ability to constrain the populations of circumbinary planets

T.A. Baycroft[1,2]*, A.H.M.J. Triaud*[1]*, J. Sahlmann*[3]

[1] School of Physics and Astronomy, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK
[2] Tsung-Dao Lee Institute, Shanghai Jiao Tong University, 1 Lisuo Road, Shanghai 201210, China
[3] European Space Agency (ESA), European Space Astronomy Centre (ESAC), Camino Bajo del Castillo s/n, 28692, Villanueva de la Cañada, Madrid, Spain

MNRAS, in press - Accepted (arxiv.org/pdf/2603.02198)

The coming data releases of *Gaia* are expected to result in an upheaval of exoplanet science, in particular for long period giant planets ($0.2\,\mathrm{M_J} \leq M \leq 25\,\mathrm{M_J}$). One class of exoplanets which *Gaia* will help investigate is circumbinary planets. Using the current knowledge of the circumbinary exoplanet population as well as expectations for the *Gaia* sensitivity, we investigate the impact *Gaia* will have on our understanding of circumbinary planets. We compare our results to a pre-launch estimate, the main differences arising from a better understanding of the circumbinary planet population, which result in a lower expected yield than previously predicted, though still significant compared to the known population. We make a rough yield estimate, with conservative detection criteria and parameter-space cuts, predicting in the 10s - 100s of detections in *Gaia* DR4. More importantly, we show how the yield estimate varies strongly with different assumptions on the injected circumbinary population, showing *Gaia*'s sensitivity to the mass and orbital period distribution of circumbinary planets. We find that *Gaia* circumbinary exoplanet detections will be biased towards planets closer to the instability zone surrounding the binary, due to the larger number of binaries on wider orbits and the limited timespan of *Gaia*. We also assess the impact *Gaia* will have on known circumbinary systems, one being that it may resolve the question of reliability of the claimed planets orbiting post-common-envelope binaries, with *Gaia* DR5 being sensitive to between 3 and 11 out of 32 such planet candidates.

Download/Website: `https://arxiv.org/pdf/2603.02198`

Contact: `thomasbaycroftastro@gmail.com or tbaycroft@sjtu.edu.cn`

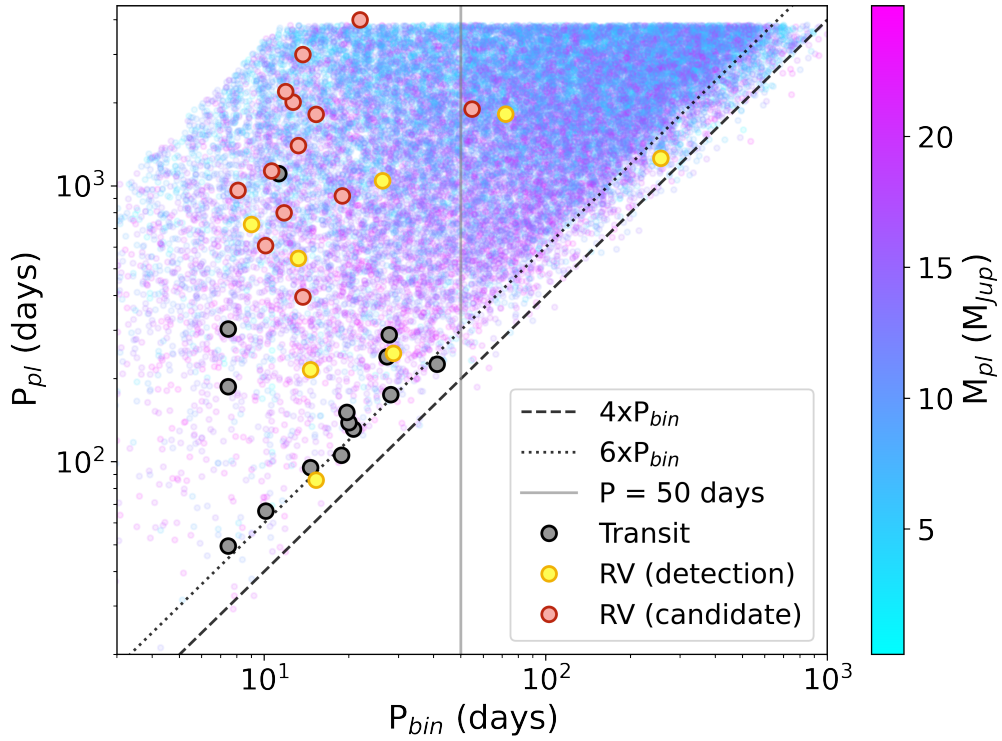

Figure 1: Binary and Planet periods for the detected planets in the synthetic yield of circumbianry planets (coloured by planet mass) alongside known circumbinary planets detected by transit or radial velocities. Dashed and dotted lines show the approximate stability threshold at $4 \times P_{\rm bin}$ and approximate location of the "pile-up" from the transiting systems at $6 \times P_{\rm bin}$. The vertical lines shows the 50 day marker that we use to distinguish the type of binaries most studied by the transit and radial velocity samples.

Exoplanets synchronization in the habitable zone: Learning from Venus' retrograde rotation

S. Ferraz-Mello[1]

[1] Institute of Astronomy, Geophysics and Atmospheric Sciences, University of São Paulo, Brasil

The Astronomical Journal, in press (arXiv:2512.06526)

The rotation of a planet located in the habitable zone of a solar-type star can be reversed by a smooth process associated with the formation of its atmosphere and the increase of stronger torques, opposite to normal tidal torques. Our understanding of the rotational dynamics of Venus is revisited to analyze what might happen to exoplanets in the habitable zone of a solar-type star. The creep tide theory is used to calculate the gravitational tidal torque. Mathematical analysis is used to study the differential equation resulting from the combined effects of tidal torque and atmospheric torque. It shows that no collision with other bodies or critical planetary perturbations is necessary to convert the rotation of an Earth or super-Earth with a significant atmosphere formed during its evolution into a retrograde rotation. The reversal of a planet's rotation is not an exceptional event and may have occurred many times among known exoplanets in the habitable zone. It is sufficient for the planet to be at a sufficiently short distance from its host star to allow tidal torques to nearly synchronize the planet's rotation before most of its atmosphere forms (but not so close that stellar radiation destroys the formed atmosphere). When atmospheric torques become more important than tidal torques, a pitchfork bifurcation occurs: the synchronous attractor bifurcates into two asynchronous attractors, and the system evolves toward one of the asynchronous attractors. If it evolves toward the subsynchronous branch, the rotation may subsequently become retrograde. Venus's rotation is an example. None of these processes is catastrophic. Planetary atmosphere formation is a continuous and smooth process, which may be more or less efficient, but it is not a low-probability event.

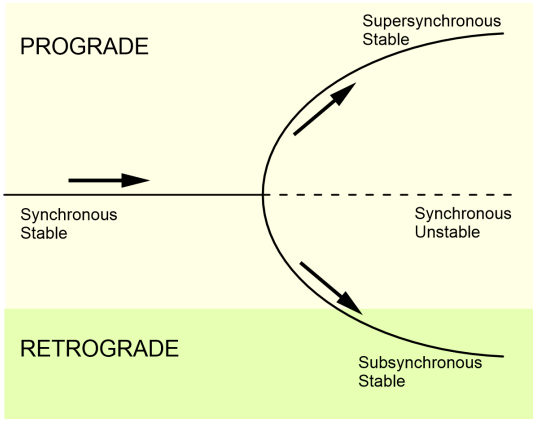

Figure 2: Scheme of the pitchfork bifurcation

Download/Website: `https://doi.org/10.3847/1538-3881/ae43e4`

Contact: `sylvio@iag.usp.br`

Multi-wavelength ALMA Imaging of HD 34282: Dust-trapping Signatures of a Vortex Candidate

X. Ma[1,2], *F. Yu*[3], *R. Dong*[1], *K. Doi*[4], *A. Kataoka*[5], *H. B. Liu*[6,7], *F. Long*[1], *T. Ueda*[5], *H. Li*[2], *N. van der Marel*[8], *Á. Kóspál*[9,4]

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AAS Journals (final journal designation pending), in press (arXiv: 2603.06992)

Azimuthal arcs in millimeter continuum emission from protoplanetary disks are often attributed to dust-trapping vortices, but definitive observational confirmation of vortices remains lacking. We present sub-$0.1''$ resolution ALMA continuum observations of the HD 34282 disk at 0.9, 1.3, 2.1, and 3.1 mm. These observations resolve a bright azimuthal arc superposed on a compact double-gap, triple-ring morphology, most clearly at shorter wavelengths, and enable us to probe the physical origin of the arc. It exhibits a lower spectral index than the surrounding rings, consistent with enhanced grain growth and/or higher dust surface density of a dust-trapping vortex. Its azimuthal width decreases with increasing wavelength, consistent with tighter confinement of larger grains, or lower optical depths at longer wavelengths. These observations probe dust with Stokes numbers $\mathrm{St} \lesssim 0.03$. Vortex models predict negligible peak shifts in this regime, consistent with the 1.3–3.1 mm data. At 0.9 mm, however, the arc peak is offset by $\sim 15^\circ \pm 4^\circ$ in the direction of disk rotation relative to longer wavelengths, and the near-side ring emission is locally dimmer compared to the far-side, likely reflecting optical-depth or temperature effects. These observations are consistent with azimuthal dust trapping, potentially associated with a vortex-induced pressure maximum.

Download/Website: `https://arxiv.org/abs/2603.06992`

Contact: `xiaoyima@stu.pku.edu.cn`

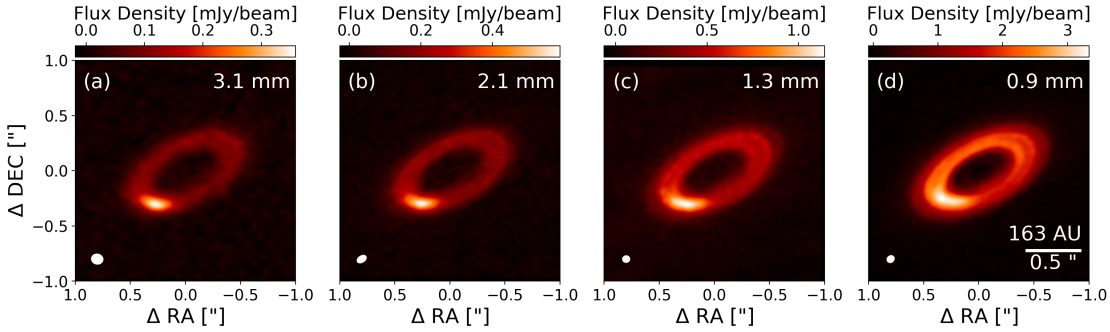

Figure 3: ALMA continuum images at 3.1 mm (a), 2.1 mm (b), 1.3 mm (c), and 0.9 mm (d). The synthesized beam size (peak SNR) is $0.095 \times 0.081''$ (60), $0.081 \times 0.049''$ (80), $0.056 \times 0.051''$ (55), and $0.059 \times 0.050''$ (133) from panel (a) to (d). The fits files are available in the online article.

3 Conferences and Workshops

Cool Stars 23 Splinter Session: Connecting Granulation and Magnetic Activity in Radial Velocities

Ancy Anna John (SOC lead), Khaled Al Moulla, Federica Resigno, Carmen San Nicolás Martinéz, Andrew Collier Cameron, Nadege Meunier, Thomas G Wilson

TOC Ariake, Tokyo Bay Area, Japan, 15 – 19 June 2026

Abstract submission is now open for the splinter session Connecting Granulation and Magnetic Activity in Radial Velocities: The Next Breakthrough for High-Precision Spectroscopy at the 23rd Cambridge Workshop on Cool Stars, Stellar Systems and the Sun (Cool Stars 23), 15 – 19 June 2026, TOC Ariake, Tokyo Bay Area, Japan.

Stellar variability phenomena, such as supergranulation and magnetically active regions, produce radial velocity signals that can easily impede the detection of Earth-like planets. In this half-day splinter we will discuss the current theoretical understanding of these phenomena, the state of the art in modeling their impact on radial velocities. In particular, we will focus on the connection between convection and magnetism.

Abstract submissions are now invited for 6 contributed talks of 15 minutes each, via the "Submissions" button at the link above. The splinter session will be divided in two blocks, separated by a 30-minute coffee break:

Block 1: Stellar variability and its impact on extremely precise radial velocities (Invited speaker: Ignasi Ribas)
Block 2: Connecting convection and magnetic activity (Invited speaker: Dainis Dravins)

Each block will include an invited talk, 3 contributed talks, and a 25-minute discussion.We encourage the community to submit abstracts for a total of contributed talks of 15 minutes each, and to submit questions and inputs for the discussion session, to ensure an engaging and fruitful discussion. Important dates:

Abstract submission deadline: 22 March 2026
Decisions by: 30 March 2026
Early-bird registration deadline: 9 April 2026
Program announced: 1 May 2026

We encourage you to register for the conference before the registration deadline to secure your place. We will only accept in-person contributions, and recorded talks will be made available after the conference. We are also soliciting opinions and relevant questions for the discussions. Please get in touch with us using the dedicated splinter email: eprvcoolstars23@gmail.com
We do not accept poster submission through the splinter. Poster abstracts can, however, be submitted through the main conference website (deadline 7 May 2026). We encourage you to submit a poster via the main conference poster submission if you are not selected for a contributed talk in our splinter (we will notify the selected speakers before the poster deadline). Unsuccessful submissions for talks at our splinter will not be automatically considered for poster presentation.
We look forward to seeing you in Tokyo!
The CS23 Granulation Splinter SOC:
Ancy Anna John (SOC lead), Khaled Al Moulla, Federica Rescigno, Carmen San Nicolás Martinéz, Sophia Sulis, Nadege Meunier, Andrew Collier Cameron, Tom Wilson

Download/Website: `https://eprvcoolstars23.github.io`

Contact: `eprvcoolstars23@gmail.com a.a.john@bham.ac.uk`

Multiplicity of cool stars and their evolution - Splinter session at Cool Stars 23

M.I. Swayne (Splinter session co-chair)

Tokyo, Japan, 15/06/2026 - 19/06/2026

On behalf of its SOC, I am pleased to announce the splinter session 'Multiplicity of cool stars and their evolution', taking place at the 23rd Cambridge Workshop on Cool Stars, Stellar Systems and the Sun (Cool Stars 23), 15 – 19 June 2026, TOC Ariake, Tokyo Bay Area, Japan.

In this half-day splinter session we will discuss many of these exploring themes including but not limited to:
- Formation of binaries and the subsequent planet formation
- Dynamical effects of multiple systems and the orientation of the planetary orbits
- Interactions in close binary systems
- Measurement of stellar properties
- The current state and future prospects of observing multiple star systems
- How multiple star systems can inform interactions in Cool Dwarf – Brown dwarf/exoplanet systems

In the first of two session blocks, we will first discuss current developments and challenges in the multiplicity of Cool Stars, before in the second block exploring future prospects in the field. Each block will consist of multiple invited plenary talks and a number of contributed talks collated from submitted abstracts. Abstract submission is now open for these talks, which will last between 5-7 minutes and aim to give short windows into the field. Contributed talks in the first block will focus on emerging results and open questions in the Multiplicity of Cool Stars, while those in the second block will mostly be on the subject of future missions or research. We particularly welcome abstract submissions from PhD students and Early Career Researchers. The splinter will end with a Discussion session using queries and responses on the topics and talks of the splinter gathered before and during the conference. It will involve a panel-style dialogue highlighting the most pressing unsolved problems and opportunities for collaboration, giving early-career researchers a central role in articulating future directions.

Early-bird registration for the conference: 9 April 2026
Programme announced: 1 May 2026

We hope to see you in Tokyo!

Download/Website: `https://stellarmultiplicity.github.io/cs23/`
Contact: `stellarmultiplicity@gmail.com`

UK 'National Astronomy Meeting' (NAM 2026) exoplanet sessions

Conference chair: Benjamin Gompertz

Detection and characterisation session chairs: Madison Scott, Daisy Turner, Ed Bryant, & Amaury Triaud

Atmospheres session chairs: Vatsal Panwar, Mathilde Timmermans, & Anjali Piette

University of Birmingham, UK, Monday 20th July – Friday 24th July, 2026

The University of Birmingham is hosting the annual UK National Astronomy Meeting (NAM 2026) from Monday the 20th to Friday the 24th of July, 2026. NAM2026 covers the full range of astronomy research in the UK, including the instrumentation and astro-particle communities, as well as other key issues relevant to the UK astronomy community. NAM2026 is a hybrid conference, where the majority of participants are expected to attend in person. By using a hybrid model we aim to allow as many people as possible to experience the conference and learn about the exciting astronomy and space science research being conducted around the UK and further afield.

We invite contributions for two sessions: "Exoplanet detection, characterisation, occurrence rates, architecture & population studies" and "Atmospheres and interiors of exoplanets and brown dwarfs". Please submit your abstract via the relevant forms linked below (or under the Programme subsection of the webpage), which will be open until 23:45 on 2nd April, and share this with anyone who might be interested.

Exoplanet detection, characterisation, occurrence rates, architecture & population studies (session nickname: ExoChar)
Submit an abstract here: `https://forms.cloud.microsoft/Pages/ResponsePage.aspx?id=z8oksN7eQUKhXDyX1VPp8_D1137LL05Imvy5L5ccfk5UNlVWQkVVR0xXRTJZUDhIN1pNOVJKN0FSUC4u`
This session aims to bring together those currently working on and/or those who are interested in observational and theoretical aspects of exoplanet detection, system architecture, and demographic studies, including the inference of occurrence rates and orbital properties. Studies of planetary interiors and atmospheric characterisation are not within the scope of this session. We particularly encourage submissions from early-career researchers.

Atmospheres and interiors of exoplanets and brown dwarfs (session nickname: ExoAtmInt)
Submit an abstract here: `https://forms.cloud.microsoft/Pages/ResponsePage.aspx?id=z8oksN7eQUKhXDyX1VPp86dlj3dhFB5DvP5Qd06n7sBUNVkzS1ZKQVNPUVRVOUs1MjQ5SjJDSUtNRC4u`
Summary: Atmospheres and interiors of substellar objects, ranging from small rocky exoplanets to gas giants and brown dwarfs, encode the outcomes of physical processes that govern their formation, evolution, and population demographics. Characterising them is the key to answering the fundamental questions about their physical nature. Aim: The aim of this session is to bring together common themes across the wide variety of research in observational analysis and theoretical modelling in the field of characterisation of substellar atmospheres. The session will highlight the current state of the field and provide a platform to discuss and share the perspectives for the share the perspectives for the characterisation of exoplanets and BDs using next generation facilities like the ELT and Ariel in the next 5 years. We especially invite contributions from early-career researchers on recent observations, models, and simulations for substellar atmospheres and interiors across a wide range of parameter space. The session will cover a wide range of topics in this context, including but not limited to atmospheric observations and models, interior structure models, formation and evolution, atmospheric loss and habitability.

We look forward to welcoming you to Birmingham this summer!

Download/Website: *https://uobevents-national-astronomy-meeting-2026.eventsair.site*

Contact: `nam26@star.sr.bham.ac.uk`

4 Others

ESA Archival Research Visitor Programme

Guido De Marchi

ESAC (Spain) and ESTEC (Netherlands), Autumn 2026 and Winter 2027

To increase the scientific return from its space science missions, the European Space Agency (ESA) welcomes applications from scientists interested in pursuing research projects based on data publicly available in the ESA Space Science Archives.

The ESA Archival Research Visitor Programme is open to scientists, at all career levels, who are affiliated with institutes in ESA Member States and Cooperating States. All visits must comply with the ESA security directives, which may necessitate additional checks. Early-career scientists and PhD students are particularly encouraged to apply. We encourage applications from women and minorities. The peer-review evaluation process is anonymised to ensure equal opportunities for all applicants.

During their stay, visiting scientists will have access to archives and mission specialists for help with the retrieval, calibration, and analysis of archival data. In principle, all areas of space research covered by ESA science missions can be supported.

Residence lasts typically between one and three months, also distributed over multiple visits. Research projects can be carried out at ESAC (Madrid, Spain) and at ESTEC (Noordwijk, Netherlands). To offset the expenses incurred by visitors, ESA covers travel costs from and to the home institution and provides support for lodging expenses and meals.

Applications received by 30 April 2026, 23:59 UTC, will be considered for visits in autumn 2026 and winter 2027.

For further details, including areas of research and contact information, please refer to the website and email address indicated below.

Download/Website: `https://www.cosmos.esa.int/web/esdc/visitor-programme`

Contact: `arvp@cosmos.esa.int`

5 As seen on astro-ph

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

February 2026

astro-ph/2602.00225: **A Roman Coronagraph Spectroscopic Mode Demonstration** *by Thayne Currie et al.*
astro-ph/2602.00235: **Detecting and Characterizing Companions with a Calibrated Gaia DR2, DR3, and Hipparcos Catalog (G23H)** *by William Thompson et al.*
astro-ph/2602.00382: **Radial and Rotational Velocities of a Volume-Complete Sample of M Dwarfs with Masses 0.1-0.3 Msun within 15 parsecs** *by Jennifer G. Winters et al.*
astro-ph/2602.02910: **ExoDNN: Boosting exoplanet detection with artificial intelligence. Application to Gaia Data Release 3** *by A. Abreu et al.*
astro-ph/2602.02836: **Unraveling the Brown Dwarf Desert: Four New Discoveries and a Unifying, Period-Coded Picture** *by Ján Šubjak et al.*
astro-ph/2602.02728: **Imaging Venus-like Worlds: Spectral, Polarimetric, and UV Diagnostics for the Habitable Worlds Observatory** *by Stephen R. Kane et al.*
astro-ph/2602.01620: **exoALMA XIX: Confirmation of Non-thermal Line Broadening in the DM Tau Protoplanetary Disk** *by Caitlyn Hardiman et al.*
astro-ph/2602.02289: **Helium escape in context: Comparative signatures of four close-in exoplanets** *by Anna Ruth Taylor et al.*
astro-ph/2602.02267: **A whole-planet model of the Earth without life for terrestrial exoplanet studies** *by Samantha Gilbert-Janizek et al.*
astro-ph/2602.02011: **A parametric model for externally irradiated protoplanetary disks with photoevaporative winds** *by Luke Keyte, Thomas J. Haworth*
astro-ph/2602.01894: **Two late-T dwarfs at kiloparsec distances revealed by JWST UNCOVER survey** *by D. H. Li et al.*
astro-ph/2602.02392: **What to make of the Earth's curiously intermediate land fraction?** *by David Kipping*
astro-ph/2602.03667: **Probing Atmospheric Escape Through the Near-Infrared Helium Triplet** *by C. Farret Jentink et al.*
astro-ph/2602.03657: **Architectures of Planetary Systems II: Trends with Host Star Mass and Metallicity** *by Alex R. Howe et al.*
astro-ph/2602.03409: **The ESO SupJup Survey IX: Isotopic evidence of a recent formation for Luhman 16AB** *by S. de Regt et al.*
astro-ph/2602.03393: **The asymmetric structure of the inner disc around HD 142527 A with VLTI/MATISSE** *by M. B. Scheuck et al.*
astro-ph/2602.03498: **Atmospheric characterization of HIP 67522 b with VLT/CRIRES+. VLT/CRIRES+ suggests a heavier planet and hints at deuterium fractionation** *by A. Lavail et al.*
astro-ph/2602.04198: **Propulsion Trades for a 2035-2040 Solar Gravitational Lens Mission** *by Slava G. Turyshev*
astro-ph/2602.04840: **The EXoplanet Climate Infrared TElescope (EXCITE): A balloon-borne mission to measure spectroscopic phase curves of transiting hot Jupiters** *by Timothy D. Rehm et al.*
astro-ph/2602.05247: **ALMA 873 μm Polarization Observations of the PDS 70 Disk** *by Hauyu Baobab Liu et al.*
astro-ph/2602.05300: **Sulfur Enrichment in Close-in Exoplanet Atmospheres Induced by Pebble Drift across the Salt Line** *by Kanon Nakazawa, Kazumasa Ohno*
astro-ph/2602.06124: **Probing habitable regions with SRG/eROSITA** *by E. Gatuzz et al.*

astro-ph/2602.06551: **AB Aur, a Rosetta stone for studies of planet formation (IV): C/O estimates from CS and SO interferometric observations** *by Pablo Rivière-Marichalar et al.*

astro-ph/2602.06722: **The effect of JWST/NIRSpec data reduction on the retrieval of WASP-39b atmospheric properties** *by J. Roy-Perez et al.*

astro-ph/2602.06738: **Dilution of accreted planetary matter in hot DA white dwarfs according to their mass** *by M. Deal et al.*

astro-ph/2602.07127: **A New Strategy for Using Spectroscopic Phase Curves to Characterize Non-Transiting Planets** *by Ted M. Johnson, Avi M. Mandell*

astro-ph/2602.07731: **Dynamical Mass Constraints on Transition Disk Perturbers with the G23H Catalog** *by Dori Blakely et al.*

astro-ph/2602.07528: **A tension between dust and gas radii: the role of substructures and external photoevaporation in protoplanetary disks** *by Luca Delussu et al.*

astro-ph/2602.08087: **Impact of embedded circumplanetary winds on the circumstellar disk: I. Reshaping the local accretion environment** *by Danilo Sepúlveda-Rojas et al.*

astro-ph/2602.08806: **Two-Dimensional Kelvin-Helmholtz Instability with Anisotropic Pressure** *by Shishir Biswas et al.*

astro-ph/2602.09224: **Characterisation of starspot structure and differential rotation of Kepler-411** *by Mikko Tuomi et al.*

astro-ph/2602.09160: **The Y Dwarf Population with HST: unlocking the secrets of our coolest neighbours – III. Near-Infrared Photometry** *by Clémence Fontanive et al.*

astro-ph/2602.08200: **JWST spectral retrieval of cold directly imaged planet WD0806 b and the first measurement of altitude-dependent K_{zz} in exoplanet atmospheres** *by Ben W. P. Lew et al.*

astro-ph/2602.08973: **Indications of Rapid Dust Formation in the Inner Region of a Protoplanetary Disk** *by Thanawuth Thanathibodee et al.*

astro-ph/2602.08929: **RedDots: Multiplanet system around M dwarf GJ 887 in the solar neighborhood** *by C. Hartogh et al.*

astro-ph/2602.09129: **Limits on the Post-eclipse Emission Spectrum of HD 80606 b From High-Resolution Spectroscop** *by Luke Finnerty et al.*

astro-ph/2602.10333: **Searching for radio emission from stellar wind-magnetosphere interaction or co-rotation breakdown in brown dwarfs** *by Rebeca Pirvu Malanda et al.*

astro-ph/2602.10330: **Efficient reduction of stellar contamination and noise in planetary transmission spectra using neural networks** *by David S. Duque-Castaño et al.*

astro-ph/2602.10308: **Carbon from Interstellar Clouds to Habitable Worlds** *by Edwin A. Bergin et al.*

astro-ph/2602.10369: **Not Earth-like Yet Temperate? More Generic Climate Feedback Configurations Still Allow Temperate Climates in Habitable Zone Exo-Earth Candidates** *by Chaucer Langbert, Dániel Apai*

astro-ph/2602.10198: **Keck Observations in the INfrared of Taurus and ρ Oph Exoplanets And Ultracool dwarfs (KOINTREAU) II: Two Young Bound Companions to Ophiuchus Stars** *by Samuel Walker et al.*

astro-ph/2602.09553: **A Narrowband Technosignature Search Toward the Hycean Candidate K2-18b Using the VLA and MeerKAT** *by C. D. Tremblay et al.*

astro-ph/2602.10260: **Cold and eccentric: a high-spectral resolution view of 51 Eri b with VLT/HiRISE** *by A. Denis et al.*

astro-ph/2602.09422: **The compositions of the HR 8799 planets reflect accretion of both solids and metal-enriched gas** *by Jerry W. Xuan et al.*

astro-ph/2602.11271: **Gas-depleted planet formation occurred in the four-planet system around the red dwarf LHS 1903** *by Thomas G. Wilson et al.*

astro-ph/2602.10919: **HD 164604 c: a second giant planet on a 15-yr orbit and the constraint of the planet-planet mutual inclination** *by Guang-Yao Xiao et al.*

astro-ph/2602.10674: **The role of detailed gas and dust opacities in shaping the evolution of the inner disc edge subject to episodic accretion** *by Michael Cecil et al.*

astro-ph/2602.12303: **Astrophysics Wrapped 2025: Year-in-Review of Every Astrophysics arXiv Paper from 2025** *by Rommulus Francis Lewis et al.*

astro-ph/2602.11531: **Eccentricity Evolution of Warm Jupiters: The Role of Distant Perturbers and Nearby Companions** *by Ying He et al.*

astro-ph/2602.11923: **The Radius Cliff is a Waterfall: Explaining Sub-Neptune Exoplanets with Steam Worlds** *by Aritra Chakrabarty et al.*

astro-ph/2602.12017: **Velocities of Free Floaters in a Sea of Stars** *by Jun Yan Lau, Dong Lai*

astro-ph/2602.12201: **Oxygen left behind: Atmospheric Enrichment due to Fractionation in Sub-Neptunes using BOREAS** *by Marilina Valatsou et al.*

astro-ph/2602.11818: **Global magnetohydrodynamic simulations of the inner regions of protoplanetary discs. II. Vertical-net-flux regime** *by Matthew J. O. Roberts et al.*

astro-ph/2602.12977: **TIC-65910228 b / NGTS-38 b, a 180 day transiting warm super-Jupiter** *by Toby Rodel et al.*

astro-ph/2602.12522: **A Protoplanet Candidate in the PDS 66 Disk Indicated by Silicon Sulfide Isotopologues** *by Tomohiro C. Yoshida et al.*

astro-ph/2602.12906: **Gaps and Rings: A Near-Universal Trait of Extended Protoplanetary Discs** *by Quincy Bosschaart et al.*

astro-ph/2602.13051: **How hard is dust in debris disks?** *by Tobias Stein et al.*

astro-ph/2602.13463: **Dust Morphology Under Changing Dust Mass Ratios in Protoplanetary Discs** *by Matthew Murray et al.*

astro-ph/2602.13125: **TIC65910228b: A single-transit discovery of a massive long-period warm Jupiter with TESS** *by Felipe I. Rojas et al.*

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