ExoPlanet News
An Electronic Newsletter

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1 Editorial

Welcome to edition 110 of the ExoPlanet News!

Thanks a lot to all of you who contributed to this issue of the newsletter! We would also like to thank those who sent us input on how to improve the website, like for example new web-links to exoplanet-related missions or projects.

As you will see, the newsletter is this time a bit shorter than normally, given the summer break. But as always, we have abstracts of new scientific papers, job ads, two conference announcements, the monthly updates from the NASA exoplanet archive, and the overview of the new articles on astro-ph.

We are looking forward to your paper abstract, job ad or meeting announcement for the coming edition of ExoPlanet News. As usual, we would also be happy to receive feedback concerning the newsletter. The Latex template for submitting contributions of any kind, as well as all previous editions of ExoPlanet News, can be found on the webpage ExoPlanet News webpage (http://nccr-planets.ch/exoplanetnews/).

The next issue will appear September 17, 2018.

Thanks for all your support and best regards from Switzerland,

Christoph Mordasini
Sascha P. Quanz
Yann Alibert
Adrien Leleu

2 Abstracts of refereed papers

Transiting planet candidate from *K2* with the longest period

H.A.C. Giles[1], *H.P. Osborn*[2], *S. Blanco-Cuaresma*[3], *C. Lovis*[1], *D. Bayliss*[4], *P. Eggenberger*[1], *A. Collier Cameron*[5], *M.H. Kristiansen*[6,7], *O. Turner*[1], *F. Bouchy*[1], *S. Udry*[1]

[1] Observatoire de Genève, Université de Genève, Chemin des Maillettes 51, 1290 Versoix, Switzerland
[2] Aix Marseille Univ, CNRS, LAM, Laboratoire d'Astrophysique de Marseille, Marseille, France
[3] Harvard-Smithsonian Center for Astrophysics, 60 Garden Street, Cambridge, MA 02138, USA
[4] Department of Physics, University of Warwick, Gibbet Hill Road, Coventry, CV4 7AL, UK
[5] Centre for Exoplanet Science, SUPA, School of Physics and Astronomy, University of St Andrews, North Haugh, St Andrews KY16 9SS, UK
[6] DTU Space, National Space Institute, Technical University of Denmark, Elektrovej 327, DK-2800 Lyngby, Denmark
[7] Brorfelde Observatory, Observator Gyldenkernes Vej 7, DK-4340 Tølløse, Denmark

Astronomy & Astrophysics, in press (arXiv:1806.08757)

We present the transit and follow-up of a single transit event from Campaign 14 of *K2*, EPIC248847494b, which has a duration of 54 hours and a 0.18% depth.
Using photometric tools and conducting radial velocity follow-up, we vet and characterise this very strong candidate. Owing to the long, unknown period, standard follow-up methods needed to be adapted. The transit was fitted using `Namaste`, and the radial velocity slope was measured and compared to a grid of planet-like orbits with varying masses and periods. These used stellar parameters measured from spectra and the distance as measured by Gaia.
Orbiting around a sub-giant star with a radius of $2.70\pm0.12\mathrm{R_{Sol}}$, the planet has a radius of $1.11^{+0.07}_{-0.07}\mathrm{R_{Jup}}$ and a period of 3650^{+1280}_{-1130} days. The radial velocity measurements constrain the mass to be lower than $13\mathrm{M_{Jup}}$, which implies a planet-like object.
We have found a planet at 4.5 AU from a single-transit event. After a full radial velocity follow-up campaign, if confirmed, it will be the longest-period transiting planet discovered.

Download/Website: `https://arxiv.org/abs/1806.08757`

Contact: `Helen.Giles@unige.ch`

Debris Disks: Structure, Composition, and Variability

A. M. Hughes[1], *G. Duchene*[2,3], *B. C. Matthews*[4,5]

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[2] Astronomy Department, University of California, Berkeley, California 94720-3411, USA
[3] Universite Grenoble Alpes, CNRS, Institut d'Astrophysique et de Planetologie de Grenoble, 38000 Grenoble, France
[4] Herzberg Astronomy & Astrophysics Programs, National Research Council of Canada, Victoria, British Columbia V9E 2E7, Canada
[5] Department of Physics & Astronomy, University of Victoria, Victoria, British Columbia V8P 5C2, Canada

Annual Reviews of Astronomy and Astrophysics, in press (arXiv:1802.04313)

Debris disks are tenuous, dust-dominated disks commonly observed around stars over a wide range of ages. Those around main sequence stars are analogous to the Solar System's Kuiper Belt and Zodiacal light. The dust in debris disks is believed to be continuously regenerated, originating primarily with collisions of planetesimals. Observations of debris disks provide insight into the evolution of planetary systems; the composition of dust, comets, and planetesimals outside the Solar System; as well as placing constraints on the orbital architecture and potentially the masses of exoplanets that are not otherwise detectable. This review highlights recent advances in multiwavelength, high-resolution scattered light and thermal imaging that have revealed a complex and intricate diversity of structures in debris disks, and discusses how modeling methods are evolving with the breadth and depth of the available observations. Two rapidly advancing subfields highlighted in this review include observations of atomic and molecular gas around main sequence stars, and variations in emission from debris disks on very short (days to years) timescales, providing evidence of non-steady state collisional evolution particularly in young debris disks.

Download/Website: `https://arxiv.org/abs/1802.04313`

Contact: `amhughes@wesleyan.edu`

3 Jobs and Positions

Postdoc positions in the D-A-CH project

Dr. Bastian Gundlach (TU Braunschweig) and Dr. Antoine Pommerol (Universität Bern)

Postdoc positions in the D-A-CH project Two post-doc positions are available in the D-A-CH project, an international collaboration of scientists from Germany (D), Austria (A) and Switzerland (CH). The aim of this project is to better understand the activity of comets by combining laboratory experiments on analogue materials, thermophysical modelling and analysis of observations of comets. The program will formally start at the end of 2018 for a duration of three years. During the first half of the project, preparatory experiments will be conducted at all three centers (Braunschweig, Graz and Bern). In parallel, a large simulation chamber for cometary processes will be installed at the Technische Universität Braunschweig. All project participants, scientists and other partners, will join for this last phase of the D-A-CH project, as most of the experiments will be performed in this large chamber during the second half of the project. In total, the D-A-CH project comprises four positions (three post-doctoral positions and one doctoral position), two at the Technische Universität Braunschweig, one at the Institut für Weltraumforschung Graz (IWF) and one at the Universität Bern (UB). In addition, researchers from the Max-Planck-Institut fr̈ Sonnensystemforschung Göttingen (MPS) and from the Deutsches Zentrum für Luft- und Raumfahrt Berlin (DLR) will closely collaborate within this project. Team meetings on a regular basis are an integral part of the program to strengthen the collaboration between the groups.

Postdoc position at the Technische Universität Braunschweig
The Institut für Geophysik und extraterrestrische Physik (IGEP) is offering a full (TVL E13; funded by DFG) postdoctoral position in the framework of the D-A-CH project for three years. The intended starting date is between September and December 2018. Within the D-A-CH project, IGEP will be responsible for the installation of the comet simulation chamber as well as for the thermophysical modelling of the experiment and of comets. This position requires a person either skilled in experiment development and construction (e.g., vacuum techniques, experiments at cryogenic temperatures, granular materials), or skilled in thermophysical modelling. Therefore, a combination of skills listed below would be particularly advantageous:

- Ability to design and install experiments, or to develop and use thermophysical models.
- Understanding of physical processes at work on comets or other icy objects (e.g., sublimation of ices, energy and mass transport processes).
- Good knowledge of the Rosetta dataset (and/or previous cometary missions).
- Ability to work in the laboratory: prepare and characterize samples, perform measurements, collect and store data and notes...
- Ability to reduce and analyze complex experimental data.
- Ability to communicate and work with colleagues from a wide range of functional backgrounds (e.g. engineering, science, management, technical, non-technical, etc.) as part of a diverse international team is essential.
- Willingness to travel.

The working language is English. Ability to communicate in German is desired but not required. Candidates should hold a PhD at the starting date of the post-doctoral contract. To apply, please submit the following documents electronically to Dr. Bastian Gundlach (b.gundlach@tu-bs.de):

1. Letter of motivation.
2. Curriculum vitae with description of previous research experiences.

3. Contact details of people who could provide a letter of reference.

Complete applications received by August 31, 2018 will receive full consideration. The position might remain open after this date if no suitable candidate has been found.

Postdoc position at the Universität Bern A postdoctoral research position is available in the Planetary Imaging Group (PIG) at the University of Bern (CH) to conduct laboratory experiment This position is funded by the Swiss National Science Fundation (SNSF). This post-doctoral position is funded for three years with an intended starting date between September and December 2018. The hired post-doctoral researcher will spend extensive periods of time in Braunschweig towards the end of the project. Within the D-A-CH program, Bern will be mostly responsible for the selection of analogues for the non-icy parts of the samples, in particular the organic fraction, and the measurement of the spectro-photometric properties of the samples. The profile of the hired Postdoc derives from these intended responsibilities. A combination of some of the skills listed below would be particularly advantageous:

- Knowledge of mineralogy and organic chemistry relevant for the composition of organic material.
- Good understanding of the scattering of light by surfaces.
- Understanding of physical processes at work on comets or other icy objects.
- Familiarity with the concepts and methods of optical remote-sensing and/or in-situ composition measurements.
- Good knowledge of the Rosetta dataset (and/or previous cometary missions).
- Ability to work in the laboratory: prepare and characterize samples, perform measurements, collect and store data and notes...
- Ability to reduce and analyze complex experimental data.
- Ability to communicate and work with colleagues from a wide range of functional backgrounds (e.g. engineering, science, management, technical, non-technical, etc.) as part of a diverse international team is essential.
- Willingness to travel.

The working language is English. Ability to communicate in German is also desired but not required. As a result of SNSF regulations on employment, candidates should hold a PhD for no longer than 2 years at the starting date of the post-doctoral contract. To apply, please submit the following documents electronically to Dr. Antoine Pommerol (antoine.pommerol@space.unibe.ch):

1. Letter of motivation.
2. Curriculum vitae with description of previous research experiences.
3. Contact details of people who could provide a letter of reference.

Complete applications received by August 31, 2018 will receive full consideration. The position might remain open after this date if no suitable candidate has been found.

Contact: `b.gundlach@tu-bs.de antoine.pommerol@space.unibe.ch`

Two Postdoctoral Scholar Positions

Aline Vidotto
School of Physics, Trinity College Dublin, Ireland

Dublin, Start date is negotiable, but not later than June 2019

Two 3-year postdoctoral positions are available to work on modelling outflows from stars (winds) and exoplanets (atmospheric escape). The scholars will work in the group of Dr Aline Vidotto at Trinity College, Dublin, Ireland. The results of these models will be directly compared to observations of exoplanetary mass loss, such as those provided by the "CUTE" cubesat mission.

Basic qualifications: Candidates should have obtained by the starting date a PhD in Astronomy, Physics or related scientific field. Applicants should have experience with numerical and/or theoretical models of astrophysical flows. Experience with MHD modelling is desirable.

Start: The starting dates of the positions are negotiable, and could be as early as November 2018, but no later than June 2019.

Duration and salary: The length of each contract is 3 years. Salaries of postdoctoral researchers follow the Irish University Associations salary scale, with a gross salary of EUR36,854 in the first year (Point 1 at Level 2) and one Point increment per year from thereafter. Funds for conference travel (EUR3,000 per year) and computer resources will also be available. These positions are pensionable.

How to apply: Interested candidates should send a cover letter together with a full CV, a summary of their research activities and publication list to astro.jobs@tcd.ie. Please use the subject line "IRC Laureate project fellow application". Candidates should arrange for three letters of recommendation to be sent directly to the same email address. Complete applications received by 16 September 2018 will receive full consideration. After this date, applications will be considered depending on availability. These positions will remain open until filled.

Download/Website: `https://www.tcd.ie/Physics/research/groups/vidotto/`
Contact: `astro.jobs@tcd.ie`

4 Conference announcements

AGU 2018 Session: Climate and Habitability of Rocky Planets in the Solar System and Beyond

D. Koll[1]*, J. Checlair*[2]*, T. Komacek*[2]*, S. Ranjan*[1]
[1] Massachusetts Institute of Technology, Cambridge, MA
[2] University of Chicago, Chicago, IL

American Geophysical Union Meeting, Dec. 10-14, 2018

Recent advances in understanding the early habitability of Mars and Venus, the imminent exploration of rocky exoplanets by the James Webb Space Telescope, and mission proposals to search for life in the outer Solar system motivate us to consider planetary habitability from a wide range of angles.

Questions of particular interest include: What does the solar system tell us about the habitability of exoplanets, and how can exoplanets inform our understanding of habitability? What drives Earth's long-term climatic stability and how will it end? What planetary conditions affect the emergence and maintenance of life, such as long-term volatile cycling or the evolution of a planet's host star? Finally, what insight can we glean from lifeless worlds about the conditions necessary for sustaining life?

We invite studies that use observations, experiments, and theory to expand our understanding of the climates and habitability of rocky planets in our Solar System and beyond.

Confirmed speakers include: Brad Foley (Penn State)

Download/Website: `https://agu.confex.com/agu/fm18/prelim.cgi/Session/45719`

Contact: `tkomacek@uchicago.edu`

PLATO Theory Workshop 2018

Richard Nelson, Mark Wyatt

Institute of Astronomy, University of Cambridge, UK, 3 December 2018 - 5 December 2018

PLATO was adopted as ESA's M3 mission in June 2017, and is currently scheduled for launch in 2026. The mission is designed to discover and characterise thousands of extrasolar planets through a combination of space-based transit detections, a ground-based radial velocity follow-up programme and asteroseismic characterisation of the host stars, yielding accurate masses, radii and ages for the detected planetary systems. The unique capabilities of the PLATO mission will allow it to discover and characterise a broad diversity of exoplanets and planetary system architectures, including terrestrial planets in the habitable zones of their stars.

PLATO's key science goals include understanding the formation and evolution of planetary systems, and this goal will be achieved by using theoretical models of planetary system formation and evolution to interpret the observations. A number of theory Work Packages have been established to provide a focus for the theoretical work that needs to be undertaken in time for the mission launch. The primary purpose of this meeting is to provide an opportunity for members of these work packages to present and discuss recent relevant work, and to plan for future activities. Researchers who are not yet involved in the mission, but who are interested in becoming involved, will also be welcome to attend and present their work. More information about the theory packages can be found on the meeting website.

The plan for this two and half day meeting is to organise the sessions according to the various work packages that comprise the PLATO theory programme focussing on the formation and dynamical evolution of planetary systems.When registering and submitting a title and abstract for a presentation (oral or poster), it would be useful in you could indicate which work package you wish to be affiliated with for the purpose of organising the sessions. The end of the workshop is scheduled to overlap with the PLATO Week 7 meeting that will be held at the IoA from 5-7 December.

Key dates: abstract and registration deadline 2 November 2018

Download/Website: `https://www.ast.cam.ac.uk/meetings/2018/plato.theory.2018`

Contact: `r.p.nelson@qmul.ac.uk,wyatt@ast.cam.ac.uk`

5 Exoplanet Archive Updates

July 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 13, 2018

July 19, 2018

Two new confirmed planets were added this week: CoRoT-20 c and IC 4651 9122 b. These planets bring the archive's total confirmed planet count to **3,774**. If you submitted a guess in our #Exoplanets2018 contest last January, we still have 29 possible winners! Are you one of them? Let us know through social media.

We've also made some updates to the default columns in the Confirmed Planets and Composite Planet Data tables:

Column	Table	What Changed
Planet Name (pl_name)	Confirmed Planets	Changed from non-default to a default column
Discovery Facility (pl_facility)	Confirmed Planets	Changed from a non-default to a default column
Planet Name (fpl_name)	Composite Planet Data	Added as a new column and set as a default
Year of Discovery (fpl_disc)	Composite Planet Data	Added as a new column and set as a default

* A default column is a parameter that automatically displays in an interactive table upon initial loading, or when an API query requests all default columns. Please update your API queries accordingly! (`http://bit.ly/2JG8Xy0`)

July 13, 2018

We've added 24 new K2 planets, all from Campaign 10, published in Livingston et al. 2018, as well as new planet parameter sets for 22 K2 planets from the same paper. The new planets are:

K2-158, K2-224 c, K2-241 b, K2-242 b & K2-243 b & c K2-244 b, K2-245 b, K2-246 b, K2-247 b & c, K2-248 b, K2-249 b, K2-250 b, K2-251 b, K2-252 b & K2-253 b, K2-254 b & c, K2-255 b, K2-256 b, K2-257 b, K2-258 b, K2-259 b

Find their data and default parameter sets in the Confirmed Planets table (`http://bit.ly/2MqFnub`), or ALL of their published parameter sets in the Extended Planet Data table (`http://bit.ly/2NLy1Ci`). You may also view a combined parameter set for each planet listed above in the Composite Planet Data table (`http://bit.ly/2l84Qw9`). See the June 15, 2018 news item for details.

Additionally, the following planets have new parameter sets that can be accessed in the Extended Planet Data table:

K2-106 b, K2-131 b, K2-140 b, K2-152 b, K2-153 b, K2-154 b & c, K2-156 b, K2-158 b, K2-159 b, K2-162 b, K2-224 b, K2-225 b, K2-226 b, K2-228 b, K2-229 b & c, K2-230 b, K2-233 b & c, and HD 106315 b & c

July 5, 2018

This week we have added 13 new planets! These include:

EPIC 229426032 b and EPIC 246067459 b, OGLE-2017-BLG-1140L b, GJ 1132 c, K2-239 b, c, & d, K2-240 b & c, OGLE-2017-BLG-0482L b, OGLE-2014-BLG-1722L b & c, and HAT-P-11 c

There are also several additions to stellar and planet parameters for GJ 1132 b, WASP-47 b, c, d, & e, K2-106 b & c, HAT-P-11 b, GJ 9827 b, c & d, and updated masses for 49 planets from Hadden & Lithwick 2017.

We have also added transmission spectra for WASP-127 b, HAT-P-26 b, WASP-107 b, WASP-96 b, and GJ 1132 b, two emission spectra for WASP-18 b, and microlensing parameter sets for OGLE-2017-BLG-0482L b and OGLE-2017-BLG-1140L b.

We have also made a series of changes to the database column names for the Microlensing Table (`http://bit.ly/2JQr180`). Specifically, we have:

- changed the database column name for "Angular Einstein Radius [mas]" (from mlradein to mlradeinang),
- changed the database column name for the "Instantaneous Planet-star Projected and Normalized Separation" (from mlsmaxpnorm to mlsepinsnorp),
- removed the database column "Degeneracy Type" (mllensseptype), and
- added the database column "Planet Mass [Earth mass]" (mlmassplne).

Please make sure to change your API queries accordingly! (`http://bit.ly/2JG8Xy0`)

And finally, we have added the K2 Campaign 17 and 18 Targets, which are now available through the K2 Targets Search interface (`http://bit.ly/2OTAkDS`). To see the list, enter 17 or 18 as a K2 Campaign column constraint and click Submit Search.

Download/Website: `https://exoplanetarchive.ipac.caltech.edu`
Contact: `mharbut@caltech.edu`

6 Announcements

Fizeau exchange visitors program in optical interferometry - call for applications

European Interferometry Initiative

www.european-interferometry.eu, application deadline: Sep. 15

The Fizeau exchange visitors program in optical interferometry funds (travel and accommodation) visits of researchers to an institute of his/her choice (within the European Community) to perform collaborative work and training on one of the active topics of the European Interferometry Initiative. The visits will typically last for one month, and strengthen the network of astronomers engaged in technical, scientific and training work on optical/infrared interferometry. The program is open for all levels of astronomers (Ph.D. students to tenured staff), with priority given to PhD students and young postdocs. Non-EU based missions will only be funded if considered essential by the Fizeau Committee. Applicants are strongly encouraged to seek also partial support from their home or host institutions.

The deadline for applications is September 15. Fellowships can be awarded for missions to be carried out between November 2018 and April 2019!
Further informations and application forms can be found at: www.european-interferometry.eu
The program is funded by OPTICON/H2020.

Please distribute this message also to potentially interested colleagues outside of your community!

Looking forward to your applications,
Josef Hron & Péter Ábrahám
(for the European Interferometry Initiative)

Download/Website: `http://www.european-interferometry.eu`

Contact: `fizeau@european-interferometry.eu`

7 As seen on astro-ph

The following list contains all the entries relating to exoplanets and related subjects that we spotted on astro-ph during July 2018.

astro-ph/1807.00007: **Kepler Object of Interest Network II. Photodynamical modelling of Kepler-9 over 8 years of transit observations** by *J. Freudenthal et al.*

astro-ph/1807.00012: **Photoevaporation and High-Eccentricity Migration Created the Sub-Jovian Desert** by *James E. Owen, Dong Lai*

astro-ph/1807.00024: **The warm Neptunes around HD 106315 have low stellar obliquities** by *George Zhou et al.*

astro-ph/1807.00096: **Predicting radial-velocity jitter induced by stellar oscillations based on Kepler data** by *Jie Yu et al.*

astro-ph/1807.00133: **Equilibrium Points and Orbits around Asteroid with the Full Gravitational Potential Caused by the 3D Irregular Shape** by *Yu Jiang*

astro-ph/1807.00378: **The Impact of Stellar Distances on Habitable Zone Planets** by *Stephen R. Kane*

astro-ph/1807.00549: **The orbital eccentricity of small planet systems** by *Vincent Van Eylen et al.*

astro-ph/1807.00577: **Stellar contributions to the line profiles of high-resolution transmission spectra of exoplanets** by *Francesco Borsa, Andrea Zannoni*

astro-ph/1807.00657: **The GJ 504 system revisited. Combining interferometric, radial velocity, and high contrast imaging data** by *M. Bonnefoy et al.*

astro-ph/1807.00773: **The TROY project: II. Multi-technique constraints on exotrojans in nine planetary systems** by *J. Lillo-Box et al.*

astro-ph/1807.00869: **An extended hydrogen envelope of the extremely hot giant exoplanet KELT-9b** by *Fei Yan, Thomas Henning*

astro-ph/1807.01229: **A 4.6-year period brown-dwarf companion interacting with the hot-Jupiter CoRoT-20 b** by *J. Rey et al.*

astro-ph/1807.01263: **Quantifying the Observational Effort Required for the Radial Velocity Characterization of TESS Planets** by *Ryan Cloutier et al.*

astro-ph/1807.01324: **Imaging radial velocity planets with SPHERE** by *A. Zurlo et al.*

astro-ph/1807.01326: **Constraining the presence of giant planets in two-belt debris disk systems with VLT/SPHERE direct imaging and dynamical arguments** by *Elisabeth Matthews et al.*

astro-ph/1807.01330: **Centaurs potentially in retrograde co-orbit resonance with Saturn** by *Miao Li, Yukun Huang, Shengping Gong*

astro-ph/1807.01402: **The 0.6-4.55μm broadband transmission spectra of TRAPPIST-1 planets** by *E. Ducrot et al.*

astro-ph/1807.01429: **Formation of Solar system analogues II: post-gas phase growth and water accretion in extended discs via N-body simulations** by *M.P.Ronco, G.C.de Elía*

astro-ph/1807.02064: **Mineralogy, Structure and Habitability of Carbon-enriched Rocky Exoplanets: A Laboratory Approach** by *Kaustubh Hakim et al.*

astro-ph/1807.02217: **TTV-determined Masses for Warm Jupiters and their Close Planetary Companions** by *Dong-Hong Wu et al.*

astro-ph/1807.02271: **The influence of stellar flare on dynamical state of the atmosphere of exoplanet HD 209458** by *D. V. Bisikalo et al.*

astro-ph/1807.02463: **Giant planet effects on terrestrial planet formation and system architecture** by *Anna C. Childs et al.*

astro-ph/1807.02483: **Minimizing the bias in exoplanet detection - application to radial velocities of LHS 1140** by *Fabo Feng, Mikko Tuomi, Hugh R. A. Jones*

astro-ph/1807.02516: **Element history of the Laplace resonance: a dynamical approach** by *Fabrizio Paita,*

Alessandra Celletti, Giuseppe Pucacco

astro-ph/1807.02610: **White Dwarf Pollution by Asteroids from Secular Resonances** by *Jeremy L. Smallwood et al.*

astro-ph/1807.02638: **Dust evolution and satellitesimal formation in circumplanetary disks** by *Joanna Drazkowska, Judit Szulágyi*

astro-ph/1807.03193: **First determination of the temperature of a lunar impact flash and its evolution** by *J.M. Madiedo, J.L. Ortiz, N. Morales*

astro-ph/1807.03213: **Modeling the measurement accuracy of pre-atmosphere velocities of meteoroids** by *Denis Vida, Peter G. Brown, Margaret Campbell-Brown*

astro-ph/1807.03925: **Krypton isotopes and noble gas abundances in the coma of comet 67P/Churyumov-Gerasimenko** by *Martin Rubin et al.*

astro-ph/1807.04301: **The 55 Cnc system reassessed** by *V.Bourrier et al.*

astro-ph/1807.04417: **Effect of the exoplanet magnetic field topology on its magnetospheric radio emission** by *J. Varela et al.*

astro-ph/1807.04420: **Diffuser-assisted Photometric Follow-up Observations of the Neptune-sized Planets K2-28b and K2-100b** by *Gudmundur Stefansson et al.*

astro-ph/1807.04443: **Polarized Radiative Transfer in Planetary Atmospheres and the Polarization of Exoplanets** by *Jeremy Bailey, Lucyna Kedziora-Chudczer, Kimberly Bott*

astro-ph/1807.04529: **ExoMol molecular line lists XXX: a complete high-accuracy line list for water** by *Oleg L. Polyansky et al.*

astro-ph/1807.04776: **The Inner Solar System's Habitability Through Time** by *Anthony D. Del Genio et al.*

astro-ph/1807.04877: **Gravitational Waves From Ultra Short Period Exoplanets** by *J. V. Cunha, F. E. Silva, J. A. S. Lima*

astro-ph/1807.04924: **Microphysics of KCl and ZnS Clouds on GJ 1214b** by *Peter Gao, Björn Benneke*

astro-ph/1807.05136: **Exoplanet Atmosphere Measurements from Direct Imaging** by *Beth A. Biller, Mickaël Bonnefoy*

astro-ph/1807.05235: **The Hawaii Infrared Parallax Program. III. 2MASS J0249-0557 c: A Wide Planetary-mass Companion to a Low-mass Binary in the beta Pic Moving Group** by *Trent J. Dupuy et al.*

astro-ph/1807.05291: **LASSO: Large Adaptive optics Survey for Substellar Objects using the new SAPHIRA detector on Robo-AO** by *Maissa Salama et al.*

astro-ph/1807.05305: **The Origin of Heavy Element Content Trend in Giant Planets via Core Accretion** by *Yasuhiro Hasegawa et al.*

astro-ph/1807.05865: **EPIC 220501947 b and K2-237 b: two transiting hot Jupiters** by *A. M. S. Smith et al.*

astro-ph/1807.05898: **The orbital architecture and debris disks of the HR 8799 planetary system** by *Krzysztof Gozdziewski, Cezary Migaszewski*

astro-ph/1807.05901: **Dynamical evolution of triple-star systems by Lidov-Kozai cycles and tidal friction** by *Manon Bataille, Anne-Sophie Libert, Alexandre C. M. Correia*

astro-ph/1807.06033: **Metallicity-Dependent Signatures in the Kepler Planets** by *James E. Owen, Ruth Murray-Clay*

astro-ph/1807.06102: **What Does "Metallicity" Mean When Interpreting Spectra of Exoplanetary Atmospheres?** by *Kevin Heng*

astro-ph/1807.06121: **Fast focal plane wavefront sensing on ground-based telescopes** by *Benjamin L. Gerard et al.*

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