
ExoPlanet News

An Electronic Newsletter

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1 Editorial

Welcome to the 71st edition of ExoPlanet News. I'm afraid the newsletter is rather short this month with only a few items submitted for inclusion. Please send abstracts of any recently accepted or published papers for the next edition and encourage your colleagues to do the same – we rely on your submissions to produce a useful newsletter each month!

The newsletter now has a record number of subscribers (around 1250) and typically 70 – 80 exoplanet-related papers appear on arXiv every month. So if you want to bring your recent publications to the attention of an interested readership, please consider sending me an entry.

Having said that, the newsletter will take a break next month for the (northern) summer, and the next edition will be sent out at the beginning of September 2014. Please send anything relevant before then to exoplanet@open.ac.uk, and it will appear in the next edition. Remember that past editions of this newsletter, submission templates and other information can be found at the ExoPlanet News website: <http://exoplanet.open.ac.uk>.

Best wishes
Andrew Norton
The Open University

2 Abstracts of refereed papers

Larger Planet Radii Inferred from Stellar “Flicker” Brightness Variations of Bright Planet-Host Stars

*F. A. Bastien*¹, *K. G. Stassun*^{1,2}, *J. Pepper*³

¹ Vanderbilt University, Nashville, TN, USA

² Fisk University, Nashville, TN, USA

³ Lehigh University, Bethlehem, PA, USA

Astrophysical Journal Letters, published (2014ApJ...788L...9B)

Most extrasolar planets have been detected by their influence on their parent star, typically either gravitationally (the Doppler method) or by the small dip in brightness as the planet blocks a portion of the star (the transit method). Therefore, the accuracy with which we know the masses and radii of extrasolar planets depends directly on how well we know those of the stars, the latter usually determined from the measured stellar surface gravity, $\log g$. Recent work has demonstrated that the short-timescale brightness variations (“flicker”) of stars can be used to measure $\log g$ to a high accuracy of ~ 0.1 – 0.2 dex. Here, we use flicker measurements of 289 bright (Kepmag < 13) candidate planet-hosting stars with $T_{\text{eff}} = 4500$ – 6650 K to re-assess the stellar parameters and determine the resulting impact on derived planet properties. This re-assessment reveals that for the brightest planet-host stars, Malmquist bias contaminates the stellar sample with evolved stars: nearly 50% of the bright planet-host stars are subgiants. As a result, the stellar radii, and hence the radii of the planets orbiting these stars, are on average 20%–30% larger than previous measurements had suggested.

Download/Website: <http://adsabs.harvard.edu/abs/2014ApJ...788L...9B>

Contact: fabienne.a.bastien@vanderbilt.edu or fabienne.bastien@gmail.com

Detecting the spin-orbit misalignment of the super-Earth 55 Cnc e

V. Bourrier¹ & G. Hébrard^{1,2}

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² Observatoire de Haute-Provence, CNRS/OAMP, 04870 Saint-Michel-l'Observatoire, France

Astronomy & Astrophysics, in press (arXiv:1406.6813)

We present time-resolved spectroscopy of transits of the super-Earth 55 Cnc e using HARPS-N observations. We devised an empirical correction for the “color effect” affecting the radial velocity residuals from the Keplerian fit, which significantly improves their dispersion with respect to the HARPS-N pipeline standard data-reduction. Using our correction, we were able to detect the smallest Rossiter-McLaughlin anomaly amplitude of an exoplanet so far (~ 60 cm/s). The super-Earth 55 Cnc e is also the smallest exoplanet with a Rossiter-McLaughlin anomaly

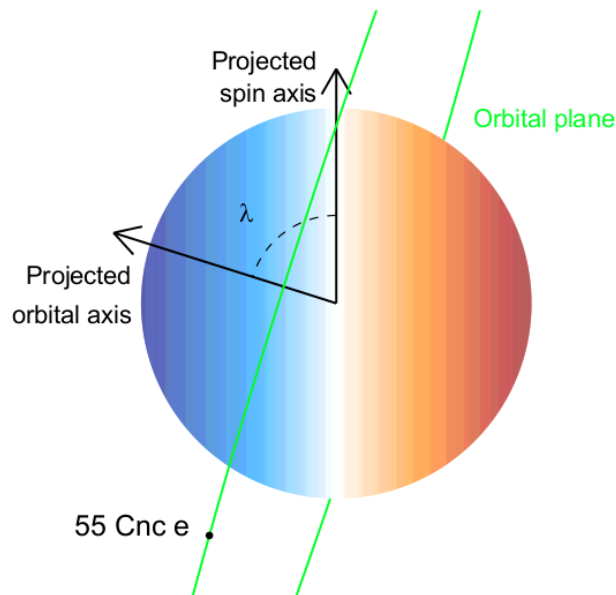


Figure 1: (Bourrier & Hébrard) View of the star 55 Cnc along the line of sight. With the star rotation, the light emitted by the half of the stellar disk moving toward the observer is blueshifted, while the light from the other half which moves away is redshifted. During the transit, the small Super-Earth 55 Cnc e (shown as a black disk, to scale) transits mainly the blueshifted half of the stellar disk because of its high sky-projected obliquity $\lambda = 72.4^\circ$. Its prograde, nearly polar orbit is plotted as a green line.

Dynamical evolution of an eccentric planet and a less massive debris disc

T. D. Pearce & M. C. Wyatt

Institute of Astronomy, University of Cambridge, Madingley Road, Cambridge, CB3 0HA, UK

Monthly Notices of the Royal Astronomical Society, in press (arXiv:1406.7294)

We investigate the interaction between an eccentric planet and a less massive external debris disc. This scenario could occur after planet-planet scattering or merging events. We characterise the evolution over a wide range of initial conditions, using a suite of n-body integrations combined with theory. Planets near the disc mid-plane remove the inner debris region, and surviving particles form an eccentric disc apsidally aligned with the planet. The inner disc edge is elliptical and lies just beyond the planet's orbit. Moderately inclined planets ($i_{\text{plt}} > \sim 20^\circ$ for $e_{\text{plt}} = 0.8$) may instead sculpt debris into a bell-shaped structure enveloping the planet's orbit. Finally some highly inclined planets ($i_{\text{plt}} \sim 90^\circ$) can maintain a disc orthogonal to the planet's plane. In all cases disc particles undergo rapid evolution, whilst the overall structures evolve more slowly. The shapes of these structures and their density profiles are characterised. The width of the chaotic zone around the planet's orbit is derived in the coplanar case using eccentric Hill radius arguments. This zone is cleared within approximately ten secular or diffusion times (whichever is longer), and debris assumes its final shape within a few secular times. We quantify the planet's migration and show it will almost always be small in this mass regime. Our results may be used to characterise unseen eccentric planets using observed debris features.

Download/Website: <http://arxiv.org/abs/1406.7294>

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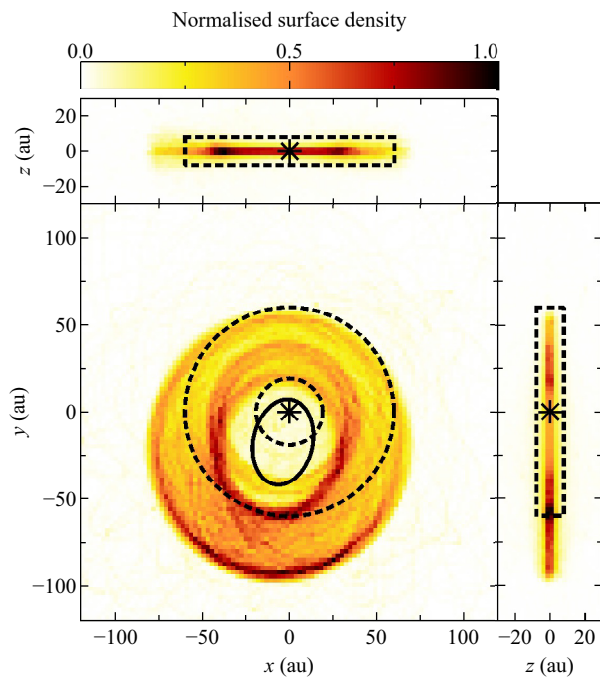


Figure 2: (Pearce & Wyatt) Surviving debris if the planet is initially coplanar with the disc midplane. The black asterisk marks the central star, and the dashed and solid lines denote the initial disc edges and instantaneous orbit of the planet respectively. Each particle has been smeared around its orbit to increase the effective number of particles on the figure; note however that this method misrepresents resonant structure (the low eccentricity ring crossing planet apocentre) which is addressed the paper.

Herschel Evidence for Disk Flattening or Gas Depletion in Transitional Disks

*J. T. Keane*¹, *I. Pascucci*¹, *C. Espaillat*², *P. Woitke*³, *S. Andrews*⁴, *I. Kamp*⁵, *W.-F. Thi*⁶, *G. Meeus*⁷, *W. R. F. Dent*⁸

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The Astrophysical Journal, published (2014ApJ...787..153K)

Transitional disks are protoplanetary disks characterized by reduced near- and mid-infrared emission, with respect to full disks. This characteristic spectral energy distribution indicates the presence of an optically thin inner cavity within the dust disk believed to mark the disappearance of the primordial massive disk. We present new *Herschel Space Observatory* PACS spectra of [OI] 63.18 μm for 21 transitional disks. Our survey complements the larger *Herschel* GASPS program ("Gas in Protoplanetary Systems") by quadrupling the number of transitional disks observed with PACS in this wavelength. [OI] 63.18 μm traces material in the outer regions of the disk, beyond the inner cavity of most transitional disks. We find that transitional disks have [OI] 63.18 μm line luminosities ~ 2 times fainter than their full disk counterparts. We self consistently determine various stellar properties (e.g. bolometric luminosity, FUV excess, etc.) and disk properties (e.g. disk dust mass, etc.) that could influence the [OI] 63.18 μm line luminosity, and we find no correlations that can explain the lower [OI] 63.18 μm line luminosities in transitional disks. Using a grid of thermo-chemical protoplanetary disk models, we conclude that either transitional disks are less flared than full disks, or they possess lower gas-to-dust ratios due to a depletion of gas mass. This result suggests that transitional disks are more evolved than their full disk counterparts, possibly even at large radii.

Download/Website: <http://adsabs.harvard.edu/abs/2014ApJ...787..153K>

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3 Conference announcements

EWASS 2015

*Cathie Clarke*¹, *Johan Knapen*² (*S.O.C. co-Chairs*)

¹ Institute of Astronomy, Cambridge, UK

² Instituto de Astrofísica de Canarias, Tenerife, Spain

La Laguna, Tenerife, 22–26 June 2015

CALL FOR EXPRESSIONS OF INTEREST TO ORGANISE SYMPOSIA AND SPECIAL SESSIONS

Deadline: Friday, 1st August 2014

The European Week of Astronomy and Space Science (EWASS 2015) will take place in La Laguna, in Tenerife, Canary Islands, Spain, from 22 - 26 June 2015. The meeting will be organised at the University of La Laguna's Guajara Campus by the European Astronomical Society (EAS), in collaboration with the Spanish Astronomical Society (SEA), the Instituto de Astrofísica de Canarias, and the Universidad de La Laguna.

We now invite proposals from colleagues who are interested in organising a Symposium or a Special Session.

A broad range of parallel sessions can be accommodated as:

(A) **Symposia** which normally consist of up to 6 blocks of 1.5 hours, stretching over 2 days, although exceptionally and in well-justified cases these symposia can be slightly longer,

(B) **Special Sessions** consisting of up to 3 blocks of 1.5 hours on the same day. Proposers should strive to make their proposals of interest to large fractions of the European astronomical community.

All proposals should be submitted as plain text email, with of the order of 500 words, and should include the following information:

1. Title and type of proposed session
2. Summary of the goal(s) of the session
3. Names of organisers (at least two persons)
4. Justification for proposed duration of the session (how many 1.5-hour blocks?)
5. Anticipated audience size
6. Possible review talks and possible speakers
7. Whether or not you plan to accept posters

Organisers of EWASS sessions are benefitting from the logistic support of the EWASS conference including the disposal of the venue room, registration handling, the portal for abstract submission and reviewing, and the hosting of a web page on the EWASS website. Organisers should not count on additional support from EWASS for attending the conference, neither for themselves nor for their invited speakers.

Note that the IAU has already selected the Symposia and Focus Meetings for the IAU General Assembly in Hawaii, in August 2015, see <http://www.iau.org/science/meetings/future/>

Proposals should be sent to the SOC Chairs: Cathie Clarke cclarke@ast.cam.ac.uk and Johan Knapen jhk@iac.es, for review by the SOC.

Applicants will be notified in September about the outcome of the selection. Individuals within the European Astronomy and Space Science communities, as well as EU sponsored networks, are strongly encouraged to propose and organise sessions.

The deadline for submitting Expressions of Interest is: Friday, 1 August 2014.

Download/Website: <http://eas.unige.ch/EWASS2015/call.jsp>

Contact: cclarke@ast.cam.ac.uk

4 Announcements

TEPCat version 2

John Southworth

Astrophysics Group, Keele University, Staffordshire, ST5 5BG, UK

Keele University, June 2014

The Transiting Extrasolar Planet Catalogue (TEPCat) was introduced in 2011 to provide access to a critical compilation of the physical properties of all known transiting planetary systems. The following data tables are freely available in html, ascii and csv formats:

- (1) measured physical properties of all known transiting planetary systems
- (2) observational quantities: sky position, V magnitude, orbital ephemeris, transit depth and duration
- (3) a catalogue of Rossiter-McLaughlin measurements
- (4) physical properties of selected systems from the author's *Homogeneous Studies* project

TEPCat has been redesigned for 2014 with a new website, separate tables for the 785 *Kepler* TTV planets, plots of discovery rate and sky position, calculation of useful quantities, better documentation, a links page and a planet count. TEPCat is updated on a daily basis and new goodies are regularly added. Check it out at the URL below. Comments and suggestions are welcome.

Download/Website: <http://www.astro.keele.ac.uk/jkt/tepcat/>

Contact: astro.js@keele.ac.uk

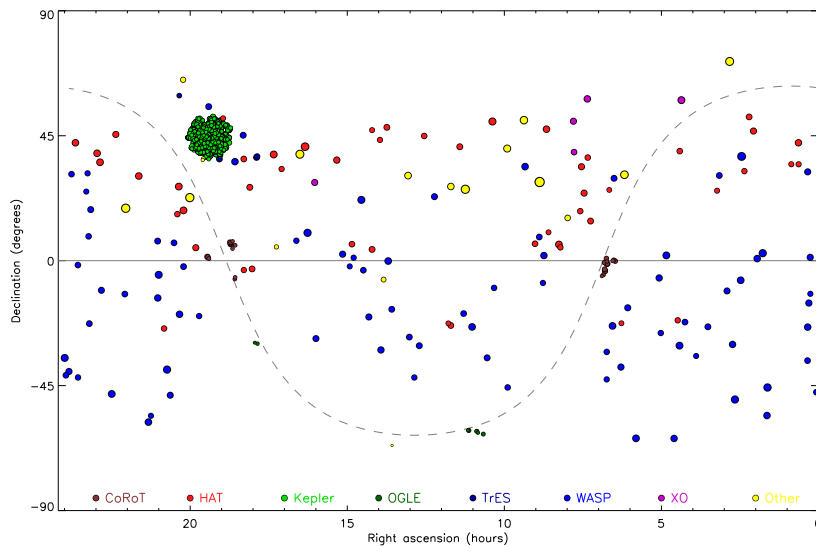


Figure 3: (Southworth) Plot of the sky positions for all known transiting planets, colour-coded according to the consortium who discovered them. The symbol sizes are bigger for brighter V -band apparent magnitudes. The galactic plane is indicated with a dashed line.

exoplanet-science.com

H.M. Relles

exoplanet-science.com

Announcement, Update – June 2014

I've now put a "Summary" page on my website (see below) that includes all the TTVs I've done so far (and I'll be continuing to expand that table as additional ones are completed) along with appropriate comparisons with literature results presented by others from fewer Kepler Quarters. In addition to summarizing the Kepler systems reported on the site, I've included values of P_{ttv} and Amp_{ttv} for others which don't yet have their own whole page but will over the coming month or two. I'm hoping that some of them might be of interest to some of your readers.

Download/Website: <http://exoplanet-science.com/>

Contact: rellesh@yahoo.com

INO call for proposals: Science Projects and Instrumentation

H. G. Khosroshahi^{1,2}

¹ Iranian National Observatory, Institute for research in Fundamental Sciences, Tehran, Iran

² School of Astronomy, Institute for research in Fundamental Sciences, 19395-5531, Tehran, Iran

INO-TR, 930009

Iranian National Observatory (INO) 3.4m optical telescope project (INO340) is the first modern Iranian project in observational astronomy and cosmology which benefits from an international touch on design, fabrication, commissioning and operation. INO340, with its generous aperture and emphasis on high image quality, located at a site with highly competitive atmospheric conditions allows and invites a number of observational projects, especially studies requiring and benefitting from high spatial resolution. Further, rather unique in its larger regional and longitude interval, INO340 will be an attractive partner in programs concerned with monitoring and long-range time series. The partnership, in science programs and/or instrumentation should take into account the creation of research opportunities in Iran. INO will be able to invest on the development of the program on the basis of fair partnership.

Download/Website: <http://www.ino.org.ir/news/call-exop.pdf>

Contact: habib@ipm.ir

5 As seen on astro-ph

The following list contains all the entries relating to exoplanets that we spotted on astro-ph during June 2014. If you see any that we missed, please let us know and we'll include them in the next issue.

- astro-ph/1406.0151: **The Transiting Exoplanet Survey Satellite** by *George R. Ricker, et al.*
- astro-ph/1406.0210 : **Cloud structure of brown dwarfs from spectroscopic variability observations** by *Esther Buenzli, et al.*
- astro-ph/1406.0425 : **Thermal desorption of circumstellar and cometary ice analogs** by *Rafael Martn-Doménech, et al.*
- astro-ph/1406.0512: **A Misaligned Prograde Orbit for Kepler-13 Ab via Doppler Tomography** by *Marshall C. Johnson, et al.*
- astro-ph/1406.0521: **Planetesimal Interactions Can Explain the Mysterious Period Ratios of Small Near-Resonant Planets** by *Sourav Chatterjee, Eric B. Ford*
- astro-ph/1406.0635: **Brown dwarf disks with ALMA** by *L. Ricci, et al.*
- astro-ph/1406.0652 : **Asteroseismology for "à la carte" stellar age-dating and weighing: Age and mass of the CoRoT exoplanet host HD 52265** by *Yveline Lebreton, Marie-Jo Goupil*
- astro-ph/1406.0694: **Tidal dissipation and the formation of Kepler near-resonant planets** by *J.-B. Delisle, J. Laskar*
- astro-ph/1406.0695: **Complex organic molecules along the accretion flow in isolated and externally irradiated protoplanetary disks** by *Catherine Walsh, et al.*
- astro-ph/1406.0818: **Two planets around Kapteyn's star : a cold and a temperate super-Earth orbiting the nearest halo red-dwarf** by *Guillem Anglada-Escudé, et al.*
- astro-ph/1406.0834: **Transit timing variations for planets coorbiting in the horseshoe regime** by *David Vokrouhlicky, David Nesvorný*
- astro-ph/1406.0863 : **Spectral Variability from the Patchy Atmospheres of T and Y Dwarfs** by *Caroline V. Morley, et al.*
- astro-ph/1406.0870: **Modeling dust growth in protoplanetary disks: The breakthrough case** by *Joanna Drazkowska, Fredrik Windmark, Cornelis P. Dullemond*
- astro-ph/1406.0884: **The properties of planets around giant stars** by *M. I. Jones, et al.*
- astro-ph/1406.0918: **Formation of Isothermal Disks around Protoplanets. I. Introductory Three-Dimensional Global Simulations for Sub-Neptune-Mass Protoplanets** by *Hsiang-Hsu Wang, et al.*
- astro-ph/1406.1184 : **New Evidence for a Substellar Luminosity Problem: Dynamical Mass for the Brown Dwarf Binary Gl 417BC** by *Trent J. Dupuy, Michael C. Liu, Michael J. Ireland*
- astro-ph/1406.1270: **Transiting exoplanets from the CoRoT space mission: XXVI. CoRoT-24: A transiting multi-planet system** by *R. Alonso, et al.*
- astro-ph/1406.1357: **Planet formation in Binaries** by *Ph. Thebault, N. Haghighipour*
- astro-ph/1406.1388 : **Gaia, Non-Single Stars, Brown Dwarfs, and Exoplanets** by *A. Sozzetti*
- astro-ph/1406.1457: **The chemistry of planet-forming regions is not interstellar** by *Klaus M. Pontoppidan, Sandra M. Blevins*
- astro-ph/1406.1672: **Unravelling tidal dissipation in gaseous giant planets** by *Mathieu Guenel, Stéphane Mathis, Françoise Remus*
- astro-ph/1406.2189: **Evolution of eccentricity and orbital inclination of migrating planets in 2:1 mean motion resonance** by *Jean Teyssandier, Caroline Terquem*
- astro-ph/1406.2207 : **Tidal dissipation in stars and giant planets** by *Gordon I. Ogilvie*
- astro-ph/1406.2316: **Optimal Survey Strategies and Predicted Planet Yields for the Korean Microlensing Telescope Network** by *Calen B. Henderson, et al.*
- astro-ph/1406.2341: **Stability of the Outer Planets in Multiresonant Configurations with a Self-gravitating Planetesimal Disk** by *Mauricio Reyes-Ruiz, Hector Aceves, Carlos E. Chavez*

- astro-ph/1406.2352: **Tidal dissipation in a homogeneous spherical body. II. Three examples: Io, Mercury, and Kepler-10 b** by *Valeri V. Makarov, Michael Efroimsky*
- astro-ph/1406.2376: **Tidal dissipation in a homogeneous spherical body. I. Methods** by *Michael Efroimsky, Valeri V. Makarov*
- astro-ph/1406.2708 : **Probing the presence of planets in transition discs' cavities via warps: the case of TW Hya** by *Stefano Facchini, Luca Ricci, Giuseppe Lodato*
- astro-ph/1406.3020: **Exoplanet population inference and the abundance of Earth analogs from noisy, incomplete catalogs** by *Daniel Foreman-Mackey, David W. Hogg, Timothy D. Morton*
- astro-ph/1406.3025: **Detecting industrial pollution in the atmospheres of earth-like exoplanets** by *Henry W. Lin, Gonzalo Gonzalez Abad, Abraham Loeb*
- astro-ph/1406.3035 : **Secular dynamics in hierarchical three-body systems with mass loss and mass transfer** by *Erez Michaely, Hagai B. Perets*
- astro-ph/1406.3093: **The curious case of HD41248. A pair of static signals buried behind red-noise** by *James S. Jenkins, Mikko Tuomi*
- astro-ph/1406.3128: **Debris disc formation induced by planetary growth** by *Hiroshi Kobayashi, Torsten Loehne*
- astro-ph/1406.3261: **Multi-band, Multi-epoch Observations of the Transiting Warm Jupiter WASP-80b** by *Akihiko Fukui, et al.*
- astro-ph/1406.3275: **Characterization and remote sensing of biological particles using circular polarization** by *Lev Nagdimunov, Ludmilla Kolokolova, Daniel Mackowski*
- astro-ph/1406.3331: **Evolution of linear warps in accretion discs and applications to protoplanetary discs in binaries** by *Francois Foucart, Dong Lai*
- astro-ph/1406.3507: **Reprocessing of Ices in Turbulent Protoplanetary Disks: Carbon and Nitrogen Chemistry** by *Kenji Furuya, Yuri Aikawa*
- astro-ph/1406.3984 : **EChOSim: The Exoplanet Characterisation Observatory software simulator** by *E. Pascale, et al.*
- astro-ph/1406.4071: **M Dwarf Metallicities and Giant Planet Occurrence: Ironing Out Uncertainties and Systematics** by *Eric Gaidos, Andrew W. Mann*
- astro-ph/1406.4082: **Cloud Base Signature in Transmission Spectra of Exoplanet Atmospheres** by *Sanaz Vahidinia, et al.*
- astro-ph/1406.4127: **Grain opacity and the bulk composition of extrasolar planets. II. An analytical model for the grain opacity in protoplanetary atmospheres** by *C. Mordasini*
- astro-ph/1406.4146: **An Atmospheric Structure Equation for Grain Growth** by *Chris W. Ormel*
- astro-ph/1406.4183: **Early Excitation of Spin-Orbit Misalignments in Close-in Planetary Systems** by *Christopher Spalding, Konstantin Batygin*
- astro-ph/1406.4194 : **The spectrum of hot methane in astronomical objects using a comprehensive computed line list** by *Sergei N. Yurchenko, et al.*
- astro-ph/1406.4402: **Discrepancies between isochrone fitting and gyrochronology for exoplanet host stars?** by *D. J. A. Brown*
- astro-ph/1406.4544: **Spin evolution of Earth-sized exoplanets, including atmospheric tides and core-mantle friction** by *Diana Cunha, et al.*
- astro-ph/1406.4864: **On Vertically Global, Horizontally Local Models for Astrophysical Disks** by *Colin P. McNally, Martin E. Pessah*
- astro-ph/1406.5195: **Temperature Fluctuations driven by Magnetorotational Instability in Protoplanetary Disks** by *Colin P. McNally, et al.*
- astro-ph/1406.5228: **Rotation-Dependent Catastrophic Disruption of Gravitational Aggregates** by *Ronald-Louis Ballouz, et al.*
- astro-ph/1406.5509 : **Some Stars are Totally Metal: A New Mechanism Driving Dust Across Star-Forming Clouds, and Consequences for Planets, Stars, and Galaxies** by *Philip F. Hopkins*
- astro-ph/1406.5587: **GJ 832c: A super-earth in the habitable zone** by *R.A. Wittenmyer, et al.*

- astro-ph/1406.5604: **Global Models of Planet Formation and Evolution** by *C. Mordasini, et al.*
- astro-ph/1406.5607: **A family of zero-velocity curves in the restricted three-body problem** by *Rodica Roman, Iharka Szucs-Csillik*
- astro-ph/1406.6048: **A Statistical Reconstruction of the Planet Population Around Kepler Solar-Type Stars** by *Ari Silburt, Eric Gaidos, Yanqin Wu*
- astro-ph/1406.6172: **SOPHIE velocimetry of Kepler transit candidates XII. KOI-1257 b: a highly-eccentric 3-month period transiting exoplanet** by *A. Santerne, et al.*
- astro-ph/1406.6381: **Transit and Radial Velocity Survey Efficiency Comparison for a Habitable Zone Earth** by *Christopher J. Burke, P. R. McCullough*
- astro-ph/1406.6435: **Atmospheric Mass Loss During Planet Formation** by *Hilke Schlichting, Re'em Sari, Almog Yalinewich*
- astro-ph/1406.6437: **Warm Ice Giant GJ 3470b. II Revised Planetary and Stellar Parameters from Optical to Near-infrared Transit Photometry** by *Lauren I. Biddle, et al.*
- astro-ph/1406.6566: **Chemical modeling of exoplanet atmospheres** by *Olivia Venot, Marcelino Agúndez*
- astro-ph/1406.6700: **Resonances of Multiple Exoplanets and Implications for Their Formation** by *Xiaojia Zhang, et al.*
- astro-ph/1406.6707 : **Snow-lines as probes of turbulent diffusion in protoplanetary discs** by *James E. Owen*
- astro-ph/1406.6714: **Physical properties, starspot activity, orbital obliquity, and transmission spectrum of the Qatar-2 planetary system from multi-colour photometry** by *L. Mancini, et al.*
- astro-ph/1406.6780: **Extrasolar Binary Planets I: Formation by tidal capture during planet-planet scattering** by *H. Ochiai, M. Nagasawa, S. Ida*
- astro-ph/1406.6813: **Detecting the spin-orbit misalignment of the super-Earth 55 Cnc e** by *Vincent Bourrier, Guillaume Hébrard*
- astro-ph/1406.6942: **WASP-117b: a 10-day-period Saturn in an eccentric and misaligned orbit** by *M. Lendl, et al.*
- astro-ph/1406.6974: **Comparison of the dust and gas radial structure in the transition disk [PZ99] J160421.7-213028** by *Ke Zhang, et al.*
- astro-ph/1406.7294: **Dynamical evolution of an eccentric planet and a less massive debris disc** by *Tim D. Pearce, Mark C. Wyatt*
- astro-ph/1406.7298 : **A new sub-stellar companion around the young star HD 284149** by *Mariangela Bonavita, et al.*
- astro-ph/1406.7303 : **Probing for Exoplanets Hiding in Dusty Debris Disks: Disk Imaging, Characterization, and Exploration with HST/STIS Multi-Roll Coronagraphy** by *Glenn Schneider, et al.*
- astro-ph/1406.7356: **A stellar-mass-dependent drop in planet occurrence rates** by *Gijs D. Mulders, Ilaria Pascucci, Daniel Apai*
- astro-ph/1406.7376: **Vertical instability and inclination excitation during planetary migration** by *G. Voyatzis, K. I. Antoniadou, K. Tsiganis*
- astro-ph/1406.7387 : **Shadows and cavities in protoplanetary disks: HD163296, HD141569A, and HD150193A in polarized light** by *Antonio Garufi, et al.*
- astro-ph/1406.7448: **Physical properties of the WASP-67 planetary system from multi-colour photometry** by *L. Mancini, et al.*
- astro-ph/1406.7567: **Deciphering the Atmospheric Composition of WASP-12b: A Comprehensive Analysis of its Dayside Emission** by *Kevin B. Stevenson, et al.*