

# 2020年 5月 第2週 新着論文サーベイ

5月4日(月曜日)

[1] [arXiv:2005.00349](#)

Title: "Ancient River Morphological Features on Mars versus Arizona Moenkopi Plateau"

Author: Antonio Paris, Laurence Tognetti

Comments: 14 pages, 12 Figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Geophysics (physics.geo-ph)

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2005.00254](#)

Title: "Computation of day length, amount of energy received over a day and over a year in function of latitude, date and obliquity"

Author: Alexandre Bordas

Comments: 18 pages, 11 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2005.00047](#)

Title: "TESS Hunt for Young and Maturing Exoplanets (THYME) III: a two-planet system in the 400 Myr Ursa Major Group"

Author: Andrew W. Mann, Marshall C. Johnson, Andrew Vanderburg, Adam L. Kraus, Aaron C. Rizzuto, Mackenna L. Wood, Jonathan L. Bush, Keighley Rockcliffe, Elisabeth R. Newton, David W. Latham, Eric E. Mamajek, George Zhou, Samuel N. Quinn, Pa Chia Thao, Serena Benatti, Rosario Cosentino, Silvano Desidera, Avet Harutyunyan, Christophe Lovis, Annelies Mortier, Francesco A. Pepe, Ennio Poretti, Thomas G. Wilson, Martti H. Kristiansen, Robert Gagliano, Thomas Jacobs, Daryll M. Lacourse, Mark Omohundro, Hans Martin Schwengeler, Stephen R. Kane, Michelle L. Hill, Markus Rabus, Gilbert A. Esquerdo, Perry Berlind, Karen A. Collins, Gabriel Murawski, Michael M. Aitken, Nezar Hazam

Sallam, Bob Massey, George R. Ricker, Roland Vanderspek, Sara Seager,  
Joshua N. Winn, Jon M. Jenkins, Thomas Barclay, Douglas A. Caldwell

Comments: Submitted to AJ. Comments welcome

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[4] [arxiv:2005.00013](#)

Title: "TESS Hunt for Young and Maturing Exoplanets (THYME) II: A 17 Myr  
Old Transiting Hot Jupiter in the Sco-Cen Association"

Author: Aaron C. Rizzuto, Elisabeth R. Newton, Andrew W. Mann, Benjamin  
M. Tofflemire, Andrew Vanderburg, Adam L. Kraus, Mackenna L. Wood,  
Samuel N. Quinn, George Zhou, Pa Chia Thao, Nicholas M. Law, Carl  
Ziegler, Cesar Briceno

Comments: Submitted to AAS Journals, 19 pages, 10 figures, 6 tables

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxiv:2005.00006](#)

Title: "NGTS-11 b / TIC-54002556 b: A transiting warm Saturn recovered from  
a TESS single-transit event"

Author: Samuel Gill, Peter J. Wheatley, Benjamin F. Cooke, Andrés Jordán,  
Louise D. Nielsen, Daniel Bayliss, David R. Anderson, Jose I. Vines,  
Monika Lendl, Jack S. Acton, David J. Armstrong, François Bouchy,  
Rafael Brahm, Edward M. Bryant, Matthew R. Burleigh, Sarah L.  
Casewell, Philipp Eigmüller, Néstor Espinoza, Edward Gillen, Michael  
R. Goad, Nolan Grieves, Maximilian N. Günther, Thomas Henning,  
Melissa J. Hobson, Aleisha Hogan, James S. Jenkins, James McCormac,  
Maximiliano Moyano, Hugh P. Osborn, Don Pollacco, Didier Queloz,  
Heike Rauer, Felipe Rojas, Paula Sarkis, Alexis M. S. Smith, Marcelo Tala  
Pinto, Rosanna H. Tilbrook, Stéphane Udry, Christopher A. Watson,  
Richard G. West

Comments: 8 pages, 3 Figures, 1 table. Submitted to ApJ letters

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2005.00505](#)

Title: "Properties and characteristics of the WFIRST H4RG-10 detectors"

Author: Gregory Mosby, Jr., Bernard J. Rauscher, Chris Bennett, Edward .S. Cheng, Stephanie Cheung, Analia Cillis, David Content, Dave Cottingham, Roger Foltz, John Gygas, Robert J. Hill, Jeffrey W. Kruk, Jon Mah, Lane Meier, Chris Merchant, Laddawan Miko, Eric C. Piquette, Augustyn Waczynski, Yiting Wen

Comments: 47 pages, 19 figures manuscript submitted to JATIS

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Cosmology and Nongalactic Astrophysics (astro-ph.CO); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2005.00272](#)

Title: "TESS Asteroseismic Analysis of the Known Exoplanet Host Star HD 222076"

Author: Chen Jiang, Timothy R. Bedding, Keivan G. Stassun, Dimitri Veras, Enrico Corsaro, Derek L. Buzasi, Przemysław Mikołajczyk, Qian-sheng, Zhang, Jian-wen, Tiago L. Campante, Thaíse S. Rodrigues, Benard Nsamba, Diego Bossini, Stephen R. Kane, Jia Mian Joel Ong, Mutlu Yıldız, Zeynep Çeik Orhan, Sibel Örtel, Tao Wu, Xinyi Zhang, Tanda Li, Sarbani Basu, Margarida S. Cunha, Jørgen Christensen-Dalsgaard, William J. Chaplin

Comments: 18 pages, 6 figures, 2 tables

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2004.15017](#)

Title: "Anelastic equatorial waves with the complete Coriolis terms"

Author: Hing Ong, Paul E. Roundy

Comments: 18 pages, 3 figures, submitted to J. Atmos. Sci. This paper originated as a course project of Hing Ong in ATM 523, Large Scale Dynamics of the Tropics, instructed by Paul Roundy. It became a chapter of Hing Ong's PhD dissertation

Subjects: Atmospheric and Oceanic Physics (physics.ao-ph); Earth and Planetary Astrophysics (astro-ph.EP); Fluid Dynamics (physics.flu-dyn)

[理論/観測/実験 etc....]

Comment!!!!

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## 5 月 5 日 (火曜日)

### [1] [arxiv:2005.01684](#)

Title: "Original Research By Young Twinkle Students (ORBYTS): Ephemeris Refinement of Transiting Exoplanets"

Author: Billy Edwards, Quentin Changeat, Kai Hou Yip, Angelos Tsiaras, Jake Taylor, Bilal Akhtar, Josef AlDaghir, Pranup Bhattarai, Tushar Bhudia, Aashish Chapagai, Michael Huang, Danyaal Kabir, Vieran Khag, Summyah Khaliq, Kush Khatri, Jaidev Kneth, Manisha Kothari, Ibrahim Najmudin, Lobanaa Panchalingam, Manthan Patel, Luxshan Premachandran, Adam Qayyum, Prasen Rana, Zain Shaikh, Sheryar Syed, Harnam Theti, Mahmoud Zaidani, Manasvee Saraf, Damien de Mijolla, Hamish Caines, Anatasia Kokori, Marco Rocchetto, Matthias Mallonn, Matthieu Bachschmidt, Josep M. Bosch, Marc Bretton, Philippe Chatelain, Marc Deldem, Romina Di Sisto, Phil Evans, Eduardo Fernandez-Lajus, Pere Guerra, Ferran Grau Horta, Wonseok Kang, Taewoo Kim, Arnaud Leroy, Frantivsek Lomoz, Juan Lozano de Haro, Veli-Pekka Hentunen, Yves Jon-  
gen

Comments: Accepted for publication in MNRAS

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Physics Education (physics.ed-ph)

[理論/観測/実験 etc....]

Comment!!!!

### [2] [arxiv:2005.01668](#)

Title: "Laboratory studies on the viability of life in H<sub>2</sub>-dominated exoplanet atmospheres"

Author: S. Seager, J. Huang, J.J. Petkowski, M. Pajusalu

Comments: Nature Astronomy this [https URL](#)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM); Quantitative Methods (q-bio.QM)

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2005.01587](#)

Title: "Testing Earth-like atmospheric evolution on exo-Earths through oxygen absorption: required sample sizes and the advantage of age-based target selection"

Author: Alex Bixel, Dániel Apai

Comments: 13 pages, 3 figures, accepted to ApJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2005.01542](#)

Title: "Microlensed Radio Emission from Exoplanets"

Author: Yuta Shiohira, Yuka Terada, Den Mukuno, Yuka Fujii, Keitaro Takahashi

Comments: 9 pages, 9 figures, one table, submitted to MNRAS

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2005.01479](#)

Title: "Thermal properties of large main-belt asteroids observed by Herschel PACS"

Author: V. Alí-Lagoa, T. G. Müller, C. Kiss, R. Szakáts, G. Marton, A. Farkas-Takács, P. Bartczak, M. Butkiewicz-Bąk, G. Dudziński, A. Marciniak, E. Podlowska-Gaca, R. Duffard, P. Santos-Sanz, J. L. Ortiz

Comments: Accepted for publication in Astronomy & Astrophysics (preprint version)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2005.01470](#)

Title: "Stellar impact on disequilibrium chemistry and on observed spectra of hot Jupiter atmospheres"

Author: D. Shulyak, L.-M. Lara, M. Rengel, N.-E. Nemec

Comments: 17 pages, 12 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2005.01440](#)

Title: "The occurrence rate of exoplanets orbiting ultracool dwarfs as probed by K2"

Author: Marko Sestovic, Brice-Olivier Demory

Comments: Accepted in A&A on 29/04/2020, 13 pages, 6 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2005.01295](#)

Title: "The range of Jupiter's flow structures fitting the Juno asymmetric gravity measurements"

Author: Keren Duer, Eli Galanti, Yohai Kaspi

Comments: 15 pages, 8 figures, In review (JGR planets)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[9] [arXiv:2005.01134](#)

Title: "A study of daytime convective vortices and turbulence in the martian Planetary Boundary Layer based on half-a-year of InSight atmospheric measurements and Large-Eddy Simulations"

Author: Aymeric Spiga, Naomi Murdoch, Ralph Lorenz, François Forget, Claire Newman, Sébastien Rodriguez, Jorge Pla-Garcia, Daniel Viúdez-Moreiras, Don Banfield, Clément Perrin, Nils T. Mueller, Ehouarn Millour, W. Bruce Banerdt

Comments: 39 pages, 16 figures, manuscript not yet peer-reviewed and submitted to Journal of Geophysical Research Planets (InSight special issue)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Atmospheric and Oceanic Physics (physics.ao-ph); Fluid Dynamics (physics.flu-dyn)

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2005.01120](#)

Title: "Can Planet Nine Be Detected Gravitationally by a Sub-Relativistic Spacecraft?"

Author: Thiem Hoang, Abraham Loeb

Comments:

4 pages, 1 figure; submitted to ApJL. Comments are welcome

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:2005.00786](#)

Title: "Visible and near-infrared observations of interstellar comet 2I/Borisov with the 10.4-m GTC and the 3.6-m TNG telescopes"

Author: J. de León, J. Licandro, C. de la Fuente Marcos, R. de la Fuente Marcos, L. M. Lara, F. Moreno, N. Pinilla-Alonso, M. Serra-Ricart, M. De Prá, G. P. Tozzi, A. C. Souza-Feliciano, M. Popescu, R. Scarpa, J. Font Serra, S. Geier, V. Lorenzi, A. Harutyunyan, A. Cabrera-Lavers

Comments: 10 pages, 5 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:2005.00587](#)

Title: "Analytical Model for the Tidal Evolution of the Evection Resonance and the Timing of Resonance Escape"

Author: William R. Ward, Robin M. Canup, Raluca Rufu

Comments: accepted for publication

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Space Physics (physics.space-ph)

[理論/観測/実験 etc....]

Comment!!!!

[13] [arXiv:2005.01687](#)

Title: "HAZMAT VI: The Evolution of Extreme Ultraviolet Radiation Emitted from Early M Star"

Author: Sarah Peacock, Travis Barman, Evgenya L. Shkolnik, R. O. Parke Loyd, Adam C. Schneider, Isabella Pagano, Victoria S. Meadows

Comments: 23 pages, 15 figures, accepted to ApJ

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA)

[理論/観測/実験 etc....]

Comment!!!!

[14] [arXiv:2005.01652](#)

Title: "Tidal Interaction between the UX Tauri Disk A/C System Revealed by ALMA"

Author: Luis A. Zapata, Luis F. Rodríguez, Manuel Fernández-López, Aina Palau, Robert Estalella, Mayra Osorio, Guillem Anglada, Nuria Huelamo

Comments: Accepted by The Astrophysical Journal

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA)

[理論/観測/実験 etc....]

Comment!!!!

[15] [arXiv:2005.01489](#)

Title: "Towards Extremely Precise Radial Velocities: I. Simulated Solar Spectra for Testing Exoplanet Detection Algorithms"

Author: Christian Gilbertson, Eric B. Ford, Xavier Dumusque

Comments: 3 pages, 1 figure, published in RNAAS

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[16] [arXiv:2005.01226](#)

Title: "Statistical properties of magnetic structures and energy dissipation during turbulent reconnection in the Earth's magnetotail"

Author: K. Bergstedt, H. Ji, J. Jara-Almonte, J. Yoo, R. E. Ergun, L.-J. Chen

Comments: 16 pages, 3 figures, submitted to Geophysical Research Letters

Subjects: Space Physics (physics.space-ph); Earth and Planetary Astrophysics (astro-ph.EP); Plasma Physics (physics.plasm-ph)

[理論/観測/実験 etc....]

Comment!!!!

[17] [arXiv:2005.01140](#)

Title: "Portuguese SKA White Book"

Author: Domingos Barbosa, Sonia Antón, João Paulo Barraca, Miguel Bergano, Alexandre C. M. Correia, Dalmiro Maia, Valério A. R. M. Ribeiro

Comments: 210 pages, UA Editora, Preface in Portuguese, contains arXiv:1607.02415, arXiv:1809.08663

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA); Solar and Stellar Astrophysics (astro-ph.SR); Popular Physics (physics.pop-ph)



[理論/観測/実験 etc....]

Comment!!!!

[18] [arXiv:2005.00861](#)

Title: "The big sibling of AU Mic: a cold dust-rich debris disk around CP-72 2713 in the  $\beta$  Pic moving group"

Author: A. Moór, N. Pawellek, P. Ábrahám, Á. Kóspál, K. Vida, A. Pál, A. Dutrey, E. Di Folco, A. M. Hughes, Q. Kral, I. Pascucci

Comments: Accepted in AJ, 20 pages, 8 figures

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA)

[理論/観測/実験 etc....]

Comment!!!!

[19] [arXiv:2005.00757](#)

Title: "On the ice coverage of dust grains in cold astrophysical environments"

Author: Alexey Potapov, Cornelia Jäger, Thomas Henning

Comments: 15 pages, 4 figures, 60 references

Subjects: Astrophysics of Galaxies (astro-ph.GA); Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

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## 5月6日(水曜日)

[1] [arXiv:2005.02374](#)

Title: "ARES I: WASP-76 b, A Tale of Two HST Spectra"

Author: Billy Edwards, Quentin Changeat, Robin Baeyens, Angelos Tsiaras, Ahmed Al-Refaie, Jake Taylor, Kai Hou Yip, Michelle Fabienne Bieger, Doriann Blain, Amelie Gressier, Gloria Guilluy, Adam Yassin Jaziri, Flavien Kiefer, Darius Modirrousta-Galian, Mario Morvan, Lorenzo V. Mugnai, William Pluriel, Mathilde Poveda, Nour Skaf, Niall Whiteford, Sam Wright, Tiziano Zingales, Benjamin Charnay, Pierre Drossart, Jeremy Leconte, Olivia Venot, Ingo Waldmann, Jean-Philippe Beaulieu

Comments: Accepted for publication in ApJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[HJ, 分光]

ultra-hot Jupiter WASP-76 b の HST で透過光&放射光分光データを解析した。先行研究では TiO や VO が見えていたが、今回の研究で背景星と他の伴星の影響のコンタミを取り除いた結果、透過光のデータから上記のフィーチャーは消えた。水のフィーチャーは以前検出されている。しかし、放射光からは TiO と水が検出できた。

[2] [arxiv:2005.02114](#)

Title: "Consistently Simulating a Wide Range of Atmospheric Scenarios for K2-18b with a Flexible Radiative Transfer Module"

Author: M. Scheucher, F. Wunderlich, J.L. Grenfell, M. Godolt, F. Schreier, D. Kappel, R. Haus, K. Herbst, H. Rauer

Comments: 28 pages, 13 figures, accepted for publication in ApJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[super-Earth]

flexible radiative transfer module, REDFOX というのを使って K2-18b という 8 地球質量の惑星の大気のシナリオを考えた。金属量や大気組成をいくつかシミュレートしたものと、実際観測された H<sub>2</sub>O のスペクトルを比較した。結果は H<sub>2</sub>-He ドミナントな大気にちょっと H<sub>2</sub>O や CH<sub>4</sub> があるだろうとのこと。また、表面に H<sub>2</sub>O の海を持たないことも支持している。

[3] [arxiv:2005.01785](#)

Title: "A two-moment radiation hydrodynamics scheme applicable to simulations of planet formation in circumstellar disks"

Author: Julio David Melon Fuksman, Hubert Klahr, Mario Flock, Andrea Mignone

Comments: 22 pages, 13 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM); Solar and Stellar Astrophysics (astro-ph.SR)

[数値計算、シミュレーション]

星周円盤の惑星形成をシミュレートする、放射流体力学の数値コードを作った。

[4] [arxiv:2005.01740](#)

Title: "A Coupled Analysis of Atmospheric Mass Loss and Tidal Evolution in XUV Irradiated Exoplanets: the TRAPPIST-1 Case Study"

Author: Juliette Becker, Elena Gallo, Edmund Hodges-Kluck, Fred C. Adams, Rory Barnes

Comments: accepted to AJ. See extra figures, data, and scripts at this [https URL](https://github.com/jbecker1991/trappist1)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[TRAPPIST-1]

潮汐進化と XUV が引き起こす大気の質量損失の解析を組合わせて、まずは TRAPPIST-1 系を解析した。惑星 d と h には海が存在する、e, f, g はゼロではない、b c はロストしているという結果になった。

5月7日(木曜日)

[1] [arXiv:2005.02747](#)

Title: "Relaxation of Viscoelastic Tumblers with Application to 1I/2017 ('Oumuamua) and 4179 Toutatis"

Author: James A. Kwiecinski

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2005.02712](#)

Title: "Annular substructures in the transition disks around LkCa 15 and J1610"

Author: S. Facchini, M. Benisty, J. Bae, R. Loomis, L. Perez, M. Ansdell, S. Mayama, P. Pinilla, R. Teague, A. Isella, A. Mann

Comments: 17 pages, accepted for publication in Astronomy & Astrophysics

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2005.02700](#)

Title: "Why do warm Neptunes present nonzero eccentricity?"

Author: A. C. M. Correia, V. Bourrier, J.-B. Delisle

Comments: 8 pages, 2 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2005.02568](#)

Title: "The Hubble PanCET program: Transit and Eclipse Spectroscopy of the Strongly Irradiated Giant Exoplanet WASP-76b"

Author: Guangwei Fu, Drake Deming, Joshua Lothringer, Nikolay Nikolov, David K. Sing, Eliza M.-R. Kempton, Jegug Ih, Thomas M. Evans, Kevin Stevenson, H.R. Wakeford, Joseph E. Rodriguez, Jason D. Eastman, Keivan Stassun, Gregory W. Henry, Mercedes López-Morales, Monika Lendl, Dennis M. Conti, Chris Stockdale, Karen Collins, John Kielkopf, Joanna K. Barstow, Jorge Sanz-Forcada, David Ehrenreich, Vincent

Bourrier

Comments: 28 pages, 20 figures, submitted to ApJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2005.02536](#)

Title: "Alkaline Exospheres of Exoplanet Systems: Evaporative Transmission Spectra"

Author: Andrea Gebek, Apurva V. Oza

Comments: 21 pages, 21 figures, submitted to MNRAS

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2005.02528](#)

Title: "UV Exoplanet Transmission Spectral Features as Probes of Metals and Rainout"

Author: Joshua D. Lothringer, Guangwei Fu, David K. Sing, Travis S. Barman

Comments: 9 pages, 5 figures. Submitted to ApJL

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2005.02468](#)

Title: "Coma Anisotropy and the Rotation Pole of Interstellar Comet 2I/Borisov"

Author: Yoonyoung Kim, David Jewitt, Max Mutchler, Jessica Agarwal, Man-To Hui, Harold Weaver

Comments: 8 pages, 7 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2005.02423](#)

Title: "Photometry and Performance of SPECULOOS-South"

Author: C. A. Murray, L. Delrez, P. P. Pedersen, D. Queloz, M. Gillon, A. Burdanov, E. Ducrot, L. J. Garcia, F. Lienhard, B. O. Demory, E. Jehin, J. McCormac, D. Sebastian, S. Sohy, S. J. Thompson, A. H. M. J. Triaud,

V. V. Grootel, M. N. Günther, C. X. Huang

Comments: Accepted for publication in MNRAS, 13 pages, 12 figures, 1 table

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[9] [arxiv:2005.02806](#)

Title: "Glaciological window into the pace of the organic carbon cycle"

Author:Galvez Matthieu Emmanuel

Subjects: Atmospheric and Oceanic Physics (physics.ao-ph); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[10] [arxiv:2005.02717](#)

Title: "Solar-type Stars Observed by LAMOST and Kepler"

Author:Jinghua Zhang, Alexander I. Shapiro, Shaolan Bi, Maosheng Xiang, Timo Reinhold, Krishnamurthy Sowmya, Yaguang Li, Tanda Li, Jie Yu, Minghao Du, Xianfei Zhang

Comments: 7 pages, 6 figures

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[11] [arxiv:2005.02424](#)

Title: "The Search for MeV Electrons 2-45 AU from the Sun with the Alice Instrument Microchannel Plate Detector Aboard New Horizons"

Author:B. A. Keeney, M. Versteeg, J. Wm. Parker, S. A. Stern, P. Brunts, M. W. Davis, H. A. Elliott, K. Ennico, G. R. Gladstone, R. L. McNutt, Jr., C. B. Olkin, K. D. Retherford, K. N. Singer, J. R. Spencer, A. J. Steffl, H. A. Weaver, L. A. Young

Comments: 3 pages, 1 figure

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

5月8日(金曜日)

[1] [arXiv:2005.03635](#)

Title: "Stability of Jovian Trojans and their collisional families"

Author: Timothy R. Holt, David Nesvorny, Jonathan Horner, Rachel King, Raphael Marschall, Melissa Kamrowski, Brad Carter, Leigh Brookshaw, Christopher Tylor

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2005.03573](#)

Title: "No significant correlation between radial velocity planet presence and debris disc properties"

Author: Ben Yelverton, Grant M. Kennedy, Kate Y. L. Su

Comments: MNRAS, in press

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2005.03431](#)

Title: "Global Hydromagnetic Simulations of Protoplanetary Disks with Stellar Irradiation and Simplified Thermochemistry"

Author: Oliver Gressel, Jon P. Ramsey, Christian Brinch, Richard P. Nelson, Neal J. Turner, Simon Bruderer

Comments: 35 pages, 20 figures, accepted for publication in ApJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2005.03368](#)

Title: "The GAPS Programme at TNG – XXIII. HD 164922 d: a close-in super-Earth discovered with HARPS-N in a system with a long-period Saturn mass companion"

Author: S. Benatti, M. Damasso, S. Desidera, F. Marzari, K. Biazzo, R. Claudi, M.P. Di Mauro, A.F. Lanza, M. Pinamonti, D. Barbato, L. Malavolta,

E. Poretti, A. Sozzetti, L. Affer, A. Bignamini, A. S. Bonomo, F. Borsa, M. Brogi, G. Bruno, I. Carleo, R. Cosentino, E. Covino, G. Frustagli, P. Giacobbe, M. Gonzalez, R. Gratton, A. Harutyunyan, C. Knapic, G. Leto, M. Lodi, A. Maggio, J. Maldonado, L. Mancini, A. Martinez Fiorenzano, G. Micela, E. Molinari, M. Molinaro, D. Nardiello, V. Nascimbeni, I. Pagano, M. Pedani, G. Piotto, M. Rainer, G. Scandariato

Comments: 23 pages, 16 Figures. Accepted for publication on A&A

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2005.03175](#)

Title: "Oxidation of the Interiors of Carbide Exoplanets"

Author: H. Allen-Sutter, K. Leinenweber, V. Prakapenka, E. Greenberg, S.-H. Shim

Comments: 11 pages, 4 figures, submitted to The Planetary Science Journal

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2005.03056](#)

Title: "The PHOENIX Exoplanet Retrieval Algorithm and Using H<sup>-</sup> Opacity as a Probe in Ultra-hot Jupiters"

Author: Joshua D. Lothringer, Travis S. Barman

Comments: 17 pages, 18 figures. Accepted for publication in AJ

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2005.03034](#)

Title: "Modeling Radial Velocity Data of Resonant Planets to Infer Migration Histories"

Author: Sam Hadden, Matthew J. Payne

Comments: submitted to AAS Journals; Code for RV fitting available online at this [https URL](#)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2005.03020](#)

Title: "Simulating the Multi-Epoch Direct Detection Technique to Isolate the Thermal Emission of the Non-Transiting Hot Jupiter HD187123B"

Author: Cam Buzard, Luke Finnerty, Danielle Piskorz, Stefan Pelletier, Björn Benneke, Chad F. Bender, Alexandra C. Lockwood, Nicole L. Wallack, Olivia H. Wilkins, Geoffrey A. Blake

Comments: Accepted to AJ, 14 pages, 10 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM)

[理論/観測/実験 etc....]

Comment!!!!

[9] [arXiv:2005.03657](#)

Title: "Multi-Epoch VLBI of L Dwarf Binary 2MASS J0746+2000AB: Precise Mass Measurements and Confirmation of Radio Emission from Both Components"

Author: Qicheng Zhang, Gregg Hallinan, Walter Briske, Stephen Bourke, Aaron Golden

Comments: 14 pages, 7 figures, 5 tables; ApJ, accepted

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA)

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2005.03578](#)

Title: "Outbursts in Global Protoplanetary Disk Simulations"

Author: Kundan Kadam, Eduard Vorobyov, Zsolt Regály, Ágnes Kóspál, Péter Ábrahám

Comments: 16 figures

Subjects: Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

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