

2020年4月第4週 新着論文サーベイ

4月20日(月曜日)

[1] [arxiv:2004.08327](#)

Title: "Secular dynamics of hierarchical multiple systems composed of nested binaries, with an arbitrary number of bodies and arbitrary hierarchical structure. III. Suborbital effects: hybrid integration techniques and orbit-averaging corrections"

Author: Adrian S. Hamers

Comments: Accepted for publication in MNRAS. 15 pages, 4 figures. Code can be found at this [https URL](#)

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); High Energy Astrophysical Phenomena (astro-ph.HE); Solar and Stellar Astrophysics (astro-ph.SR)

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxiv:2004.08218](#)

Title: "Inertial modes of a freely rotating ellipsoidal planet and their relation to nutations"

Author: Jeremy Requier, Santiago A. Triana, Antony Trinh, Veronique Dehant

Comments: 17 pages, 4 figures, submitted to Planetary Science Journal (AAS)

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arxiv:2004.07971](#)

Title: "Exoplanet System Kepler-2 with comparisons to Kepler-1 and 13"

Author: Michael D. Rhodes, Caglar Puskullu, Edwin Budding, Timothy S. Banks

Comments: Accepted by Astrophysics and Space Science

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:2004.07951](#)

Title: "Measuring Fluxes of Meteor Showers with the NASA All-Sky Fireball Network"

Author: Steven Ehlert, Rhiannon Blaauw Erskine

Comments: 18 pages, 9 Figures, 2 Tables. Accepted in Planetary and Space Science, Meteoroids 2019 Conference Proceedings Special Issue

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxiv:2004.08280](#)

Title: "In situ evidence of firehose instability in multiple reconnection"

Author: Alexandra Alexandrova, Alessandro Retinò, Andrey Divin, Lorenzo Matteini, Olivier Le Contel, Hugo Breuillard, Filomena Catapano, Giulia Cozzani, Ivan Zaitsev, Jan Deca

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arxiv:2004.08012](#)

Title: "A Multistate Low-dissipation Advection Upstream Splitting Method for Ideal Magnetohydrodynamics"

Author: Takashi Minoshima, Keiichi Kitamura, Takahiro Miyoshi

Comments: 42 pages, 18 figures, 1 table, accepted for the publication in ApJS

Subjects: Computational Physics (physics.comp-ph); Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM); Solar and Stellar Astrophysics (astro-ph.SR); Numerical Analysis (math.NA)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arxiv:2004.07848](#)

Title: "The evolution of stellar triples: The most common evolutionary pathways"

Author: S. Toonen, S. Portegies Zwart, A. Hamers, D. Bandopadhyay

Comments: 18 pages, 16 figures, 2 tables, submitted to A&A

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:2004.07834](#)

Title: "CAB: Towards the RNA-world in the interstellar medium – detection of

urea, and search of 2-amino-oxazole and simple sugars”

Author: Izaskun Jimenez-Serra, Jesus Martin-Pintado, Victor M. Rivilla, Lucas F. Rodriguez Almeida, Elena R. Alonso Alonso, Shaoshan Zeng, Emilio J. Cocinero, Sergio Martin, Miguel Requena-Torres, Rafa Martin-Domenech, Leonardo Testi

Comments: 61 pages, 4 figures, 6 tables, accepted for Astrobiology

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!!!!

4月21日(火曜日)

[1] [arXiv:2004.09109](#)

Title: ”WASP-4 transit timing variation from a comprehensive set of 129 transits”

Author: R.V. Baluev, E.N. Sokov, S. Hoyer, C. Huitson, José A.R.S. da Silva, P. Evans, I.A. Sokova, C.R. Knight, V.Sh. Shaidulin

Comments: Accepted to MNRAS Letters. 5 pages, 1 figure. TTV data files and an online-only PDF supplement are in the download archive

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2004.09076](#)

Title: ”Warming Early Mars with Climate Cycling: The Effect of CO₂-H₂ Collision-induced Absorption”

Author: Benjamin P.C. Hayworth, Ravi Kumar Kopparapu, Jacob Haqq-Misra, Natasha E. Batalha, Rebecca C. Payne, Bradford J. Foley, Mma Ikwut-Ukwa, James F. Kasting

Comments: Publication date July 15 2020

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2004.09067](#)

Title: ”OGLE-2017-BLG-0406: *Spitzer* Microlens Parallax Reveals Saturn-mass

Planet orbiting M-dwarf Host in the Inner Galactic Disk”

Author: Yuki Hirao, David P. Bennett, Yoon-Hyun Ryu, Naoki Koshimoto, Andrzej Udalski, Jennifer C. Yee, Takahiro Sumi, Ian A. Bond, Yossi Shvartzvald, Fumio Abe, Richard K. Barry, Aparna Bhattacharya, Martin Donachie, Akihiko Fukui, Yoshitaka Itow, Iona Kondo, Man Cheung Alex Li, Yutaka Matsubara, Taro Matsuo, Shota Miyazaki, Yasushi Muraki, Masayuki Nagakane, Kohji Onishi, Clement Ranc, Nicholas J. Rattenbury, Haruno Suematsu, Hiroshi Shibai, Denis J. Sullivan, Daisuke Suzuki, Paul J. Tristram, Atsunori Yonehara, J. Skowron, R. Poleski, P. Mroz, M.K. Szymanski, I. Soszynski, S. Kozlowski, P. Pietrukowicz, K. Ulaczyk, K. Rybicki, P. Iwanek, Michael D. Albrow, Sun-Ju Chung, Andrew Gould, Cheongho Han, Kyu-Ha Hwang, Youn Kil Jung, In-Gu Shin, Weicheng Zang, Sang-Mok Cha, Dong-Jin Kim, Hyoun-Woo Kim

Comments: 40 pages, 12 figures, 10 tables, submitted to AAS journal

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arxiv:2004.08972](#)

Title: ”The carbon monoxide-rich interstellar comet 2I/Borisov”

Author: D. Bodewits, J. W. Noonan, P. D. Feldman, M. T. Bannister, D. Farnocchia, W. M. Harris, J.-Y. Li, K. E. Mandt, J. Wm. Parker, Z. Xing

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxiv:2004.08928](#)

Title: ”Quasi-Hilda Comet 231P/LINEAR-NEAT: Observation at aphelion using Himalayan Chandra Telescope (HCT)”

Author: Dhanraj S. Warjurkar, Prasad V. Arlulkar

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arxiv:2004.08839](#)

Title: ”New growth mechanism of dust grains in protoplanetary disks with mag-

netically driven disk winds”

Author:Tetsuo Taki, Koh Kuwabara, Hiroshi Kobayashi, Takeru K. Suzuki

Comments: 21 pages, 9 figures, 1 table, submitted to AAS journals

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:2004.08736](#)

Title: ”New HST data and modeling reveal a massive planetesimal collision around Fomalhaut”

Author:Andras Gaspar, George H. Rieke

Comments: 12 pages, 9 figures, accepted to PNAS

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:2004.08415](#)

Title: ”High-resolution Transmission Spectroscopy of MASCARA-2 b with EXPRES”

Author:H. Jens Hoeijmakers, Samuel H. C. Cabot, Lily Zhao, Lars A. Buchhave, René Tronsgaard, Daniel Kitzmann, Simon L. Grimm, Heather M. Cegla, Vincent Bourrier, David Ehrenreich, Kevin Heng, Christophe Lovis, Debra A. Fischer

Comments: Accepted for publication in A&A, 20 pages, 22 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:2004.08414](#)

Title: ”The dependence of global super-rotation on planetary rotation rate”

Author:Neil T. Lewis, Greg J. Colyer, Peter L. Read

Comments: Submitted to Journal of the Atmospheric Sciences. Comments welcome. This manuscript has not yet been peer reviewed

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2004.09077](#)

Title: "On the role of reduced wind mass-loss rate in enabling exoplanets to shape planetary nebulae"

Author: Ahlam Hegazi, Ealeal Bear, Noam Soker

Comments: Will be submitted in two days to allow comments by readers

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!!!!

4 月 22 日 (水曜日)

[1] [arXiv:2004.10160](#)

Title: "Determination of size, albedo and thermal inertia of 10 Vesta family asteroids with WISE/NEOWISE observations"

Author: Haoxuan Jiang, Jianghui Ji, Liangliang Yu

Comments: 29 pages, 40 figures, accepted for publication in AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2004.10106](#)

Title: "Information content of JWST-NIRSPEC transmission spectra of warm Neptunes"

Author: Andrea Guzmán Mesa, Daniel Kitzmann, Chloe Fisher, Adam Burgasser, J.H. Hoeijmakers, Pablo Márquez-Neila, Simon Grimm, Avi Mandell, Raphael Sznitman, Kevin Heng

Comments: 21 pages, 17 figures, 3 tables

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2004.10095](#)

Title: "The multi-planet system TOI-421 – A warm Neptune and a super puffy mini-Neptune transiting a G9 V star in a visual binary"

Author: Ilaria Carleo, Davide Gandolfi, Oscar Barragán, John H. Livingston, Carina M. Persson, Kristine W. F. Lam, Aline Vidotto, Michael B. Lund,

Carolina Villarreal D'Angelo, Karen A. Collins, LucaFossati, Andrew W. Howard, Daria Kubyshkina, Rafael Brahm, Antonija Oklopčić, Paul Mollière, Seth Redfield, Luisa Maria Serrano, Fei Dai, Malcolm Fridlund, Francesco Borsa, Judith Korth, Massimiliano Esposito, Matías R. Díaz, Louise Dyregaard Nielsen, Coel Hellier, Savita Mathur, Hans J. Deeg, Artie P. Hatzes, Serena Benatti, Florian Rodler, Javier Alarcon, Lorenzo Spina, Ângela R. G. Santos, Iskra Georgieva, Rafael A. García, Lucía González-Cuesta, George R. Ricker, Roland Vanderspek, David W. Latham, Sara Seager, Joshua N. Winn, Jon M. Jenkins

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arxive:2004.10094](#)

Title: "TW Hya: an old protoplanetary disc revived by its planet"

Author:Sergei Nayakshin, Takashi Tsukagoshi, Cassandra Hall, Allona Vazan, Ravit Helled, Jack Humphries, Farzana Meru, Patrick Neunteufel, Olja Panic, Daniel Price

Comments: Accepted to MNRAS, 22 pages

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxive:2004.09961](#)

Title: "The GBOT Asteroid Survey (First years: Jan. 2015 - May 2018)"

Author:S. Bouquillon, D. Souami

Comments: 4 pages, 4 figures, proceeding of the 8th ADeLA meeting, 2018, Tarija, Bolivia

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] [arxive:2004.09872](#)

Title: "Style and intensity of hydration among C-complex asteroids: a comparison to dessicated carbonaceous chondrites"

Author:S. Potin, P. Beck, F. Usui, L. Bonal, P. Vernazza, B. Schmitt

Comments: Accepted for publication in Icarus

Subjects:

Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2004.09597](#)

Title: "Keck/NIRC2 *L'*-Band Imaging of Jovian-Mass Accreting Protoplanets around PDS 70"

Author: Jason J. Wang, Sivan Ginzburg, Bin Ren, Nicole Wallack, Peter Gao, Dimitri Mawet, Charlotte Z. Bond, Sylvain Cetre, Peter Wizinowich, Robert J. De Rosa, Garreth Ruane, Michael C. Liu, Carlos Alvarez, Christoph Baranec, Élodie Choquet, Mark Chun, Jacques-Robert Delorme, Gaspard Duchêne, Andrea Ghez, Olivier Guyon, Donald N. B. Hall, Rebecca Jensen-Clem, Nemanja Jovanovic, Scott Lilley, François Ménard, Tiffany Meshkat, Maxwell Millar-Blanchaer, Henry Ngo, Christophe Pinte, Sam Ragland, Ji Wang, Ed Wetherell, Jonathan P. Williams, Marie Ygouf, Ben Zuckerman

Comments: 21 pages, 5 figures, Accepted to AJ

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:2004.09586](#)

Title: "Unusually High CO Abundance of the First Active Interstellar Comet"

Author: Cordiner, M. A., Milam, S. N., Biver, Bockelée-Morvan, Roth, N. X., Bergin, E. A., Jehin, Remijan, A. J., Charnley, S. B., Mumma, M. J., Boissier, Crovisier, Paganini, Kuan, Y.-J., D. C

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arXiv:2004.09513](#)

Title: "PLATON II: New Capabilities And A Comprehensive Retrieval on HD 189733b Transit and Eclipse Data"

Author: Michael Zhang, Yayaati Chachan, Eliza M.-R. Kempton, Heather Knutson, Wenjun, Chang

Comments: submitted to ApJ

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

ph.IM)

[理論/観測/実験 etc....]

Comment!!!!

[10] [arxiv:2004.09830](#)

Title: "The spectral impact of magnetic activity on disk-integrated HARPS-N solar observations: exploring new activity indicators"

Author: A. P. G. Thompson, C. A. Watson, R. D. Haywood, J. C. Costes, E. de Mooij, A. Collier Cameron, X. Dumusque, D. F. Phillips, S. H. Saar, A. Mortier, T. W. Milbourne, S. Aigrain, H. M. Cegla, D. Charbonneau, R. Cosentino, A. Ghedina, D. W. Latham, M. López-Morales, G. Micela, E. Molinari, E. Poretti, A. Sozzetti, S. Thompson, R. Walsworth

Comments: 13 pages, 10 figures, accepted for publication in the Monthly Notices of the Royal Astronomical Society

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

[理論/観測/実験 etc....]

Comment!!!!

4月23日(木曜日)

[1] [arxiv:2004.10510](#)

Title: "An interstellar origin for high-inclination Centaurs"

Author: Fathi Namouni, Helena Morais

Comments: 10 pages, 4 figures

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

[ケンタウルス族、TNO]

ケンタウルス族とTNOの小惑星が惑星形成時(45億年前)にどの軌道にいたかの確率分布を計算した。現在軌道系射角が60-180度にある19の小惑星でシミュレーションしたところほとんどが45億年前には極軌道にあったことが分かった。現在の惑星形成シナリオでは極軌道は考えにくいし、マイグレーションしてきたことも考えにくい(?)ため星間物質の捕獲を示唆している。

[2] [arxiv:2004.10504](#)

Title: "Thermal convection in the crust of the dwarf planet (1) Ceres"

Author: M. Formisano, C. Federico, J. Castillo-Rogez, M.C. De Sanctis, G. Magni

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

[ケレスの内部熱対流]

準惑星のケレスは密度の小ささから、氷がいっぱいあると考えられている。この論文ではケレスの成分組成を変えて、内部の熱対流特性を調べた。結果は、熱対流を起こす事は難しい、起こってもすぐ終わる。そのため現在も液体の水が存

在する可能性がある (?)

[3] [arxiv:2004.10266](#)

Title: "Ionic emissions in comet C/2016 R2 (Pan-STARRS)"

Author: Kumar Venkataramani, Shashikiran Ganesh, Kiran S. Baliyan

Comments: Accepted for Publication in MNRAS

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

[彗星]

C/2016 R2 という彗星のスペクトルが他の一般のスペクトルと違うことを示し、そのシナリオを考えた。
 C_2 , C_3 and CN が少ない代わりに CO^+ and N_2^+ の強い輝線が見えた彗星。

[4] [arxiv:2004.10678](#)

Title: "Efficient modeling of correlated noise II. A flexible noise model with fast and scalable methods"

Author: J.-B. Delisle, N. Hara, D. Ségransan

Comments: Accepted in A&A

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

[ノイズのモデリング]

計算コストを抑えてノイズモデリング, S+LEAF noise model を作った。通常 n 点のデータセットの計算コストは $O(n^3)$ になるそうだが、この方法では $O(n)$ で済む。実際に RV のデータセットに適用して有用性を示した。多分 Python のパッケージになっていて、available at <https://gitlab.unige.ch/jean-baptiste.delisle/spleaf>.

[5] [arxiv:2004.10611](#)

Title: "Radial-velocity variations due to meridional flows in the Sun and solar-type stars: impact on exoplanet detectability"

Author: Nadège Meunier, Anne-Marie Lagrange

Comments: Accepted in Astronomy and Astrophysics

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

[RV]

meridional flows (南北方向の風) の影響は RV の惑星検出にかかわってくるが、あまり考えられていない。この論文では、太陽の meridional flows の観測量から主星が太陽型星の時の RV シグナルへの寄与を調べ、critical な可能性を示した。主星が pole-on, であるほど効いてきて、地球サイズ惑星のシグナルより much larger.

[6] [arxiv:2004.10238](#)

Title: "The Composition, Excitation, and Physical State of Atomic Gas in the Debris Disk Surrounding 51 Oph"

Author: Edward B. Jenkins, Cecile Gry

Comments: 66 pages, 11 figures. To be published in the Astrophysical Journal

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

[Debris Disk]

デブリディスクを持つ、51 Oph の吸収線を UV と可視でみて、円盤構造に制限をつけた。解析の結果、ほとんどのガスが中心星から 6 AU にいて 8000K、ガスは一部イオン化していて、枯れた ISM や木星型彗星と似たような組成らしい。分子のフィーチャーは検出されず、これは円盤が視線方向と平行に近いので、分子が多い部分は円盤に隠れているだろう。

4 月 24 日 (金曜日)

[1] [arxiv:2004.11335](#)

Title: "Neutral Iron Emission Lines From The Day-side Of KELT-9b – The GAPS Programme With HARPS-N At TNG XX"

Author: L. Pino, J.M. Désert, M. Brogi, L. Malavolta, A. Wyttenbach, M. Line, J. Hoeijmakers, L. Fossati, A. S. Bonomo, V. Nascimbeni, V. Panwar, L. Affer, S. Benatti, K. Biazzo, A. Bignamini, F. Borsa, I. Carleo, R. Claudi, R. Cosentino, E. Covino, M. Damasso, S. Desidera, P. Giacobbe, A. Harutyunyan, A. F. Lanza, G. Leto, A. Maggio, J. Maldonado, L. Mancini, G. Micela, E. Molinari, I. Pagano, G. Piotto, E. Poretti, M. Rainer, G. Scandariato, A. Sozzetti, R. Allart, L. Borsato, G. Bruno, L. Di Fabrizio, D. Ehrenreich, A. Fiorenzano, G. Frustagli, B. Lavie, C. Lovis, A. Magazzù, D. Nardiello, M. Pedani, R. Smareglia

Comments: Accepted for publication on ApJL; 19 pages, 4 figures, 3 tables

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!!!!

[2] [arxiv:2004.11314](#)

Title: "TESS discovery of a super-Earth and three sub-Neptunes hosted by the bright, Sun-like star HD 108236"

Author: Tansu Daylan, Kartik Pingle, Jasmine Wright, Maximilian N. Guenther, Keivan G. Stassun, Stephen R. Kane, Andrew Vanderburg, Daniel Jontof-Hutter, Joseph E. Rodriguez, Avi Shporer, Chelsea Huang, Tom Mikal-Evans, Mariona Badenas-Agusti, Karen A. Collins, Benjamin Rackham, Sam Quinn, Ryan Cloutier, Kevin I. Collins, Pere Guerra, Eric L. N.

Jensen, John F. Kielkopf, Bob Massey, Richard P. Schwarz, David Charbonneau, Jack J. Lissauer, Jonathan M. Irwin, Ozgur Basturk, Benjamin Fulton, Abderahmane Soubkiou, Steve Howell, Carl Ziegler, Cesar Briceno, Nicholas Law, Andrew W. Mann, Nic Scott, Elise Furlan, David R. Ciardi, Rachel Matson, Coel Hellier, David R Anderson, R. Paul Butler, Jeffery D. Crane, Joanna K. Teske, Steve Schectman, George R. Ricker, Roland Vanderspek, S. Seager, Joshua N. Winn

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2004.11109](#)

Title: "On the sodium enhancement in spectra of slow meteors and the origin of Na-rich meteoroids"

Author: Pavol Matlovič, Juraj Tóth, Leonard Kornoš, Stefan Loehle

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2004.11061](#)

Title: "Key Atmospheric Signatures for Identifying the Source Reservoirs of Volatiles in Uranus and Neptune"

Author: O. Mousis, A. Aguichine, D.H. Atkinson, S.K. Atreya, T. Cavalié, J.I. Lunine, K.E. Mandt, T. Ronnet

Comments: Accepted for publication in Space Science Reviews

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2004.11008](#)

Title: "High-resolution optical spectroscopic observations of comet 21P/Giacobini-Zinner in Its 2018 apparition"

Author: Yoshiharu Shinnaka, Hideyo Kawakita, Akito Tajitsu

Comments: 12 pages, 6 figures, author final submission version, published to Astronomical Journal on April 13, 2020

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2004.11006](#)

Title: "Stratospheric temperature anomalies as imprints from the dark Universe"

Author: K. Zioutas, A. Argiriou, H. Fischer, S. Hofmann, M. Maroudas, A. Pappa,
Y.K. Semertzidis

Comments: 18 pages, 11 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!!!!

[7] [arXiv:2004.10990](#)

Title: "Observations of Disintegrating Long-Period Comet C/2019 Y4 (ATLAS)
– A Sibling of C/1844 Y1 (Great Comet)"

Author: Man-To Hui, Quan-Zhi Ye

Comments: 9 figures, 4 tables; submitted to AJ, under review

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2004.10989](#)

Title: "Super-resolution Imaging of the Protoplanetary Disk HD 142527 Using
Sparse Modeling"

Author: Masayuki Yamaguchi, Kazunori Akiyama, Takashi Tsukagoshi, Takayuki
Muto, Akimasa Kataoka, Fumie Tazaki, Shiro Ikeda, Misato Fukagawa,
Mareki Honma, Ryohei Kawabe

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:2004.10770](#)

Title: "Observations of Disequilibrium CO Chemistry in the Coldest Brown
Dwarfs"

Author: Brittany E. Miles, Andrew J. I. Skemer, Caroline V. Morley, Mark S.
Marley, Jonathan J. Fortney, Katelyn N. Allers, Jacqueline K. Faherty,
Thomas R. Geballe, Channon Visscher, Adam C. Schneider, Roxana

Lupu, Richard S. Freedman, Gordon L. Bjoraker

Comments: Accepted to the Astronomical Journal. 24 Pages, 16 Figures, 4 Tables. take care

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2004.10767](#)

Title: "TESS unveils the phase curve of WASP-33b. Characterization of the planetary atmosphere and the pulsations from the star"

Author: C. von Essen, M. Mallonn, C. C. Borre, V. Antoci, K.G. Stassun, S. Khalafinejad, G. Tautvaivsiene

Comments: 19 pages, 15 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:2004.10755](#)

Title: "Assessment of Supervised Machine Learning for Atmospheric Retrieval of Exoplanets"

Author: Matthew C. Nixon, Nikku Madhusudhan

Comments: 13 pages, 14 figures. Accepted for publication in MNRAS

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:2004.11328](#)

Title: "Origin and evolution of the Galactic inventories of interstellar dust and its composition"

Author: Anuj Gupta, Sandeep Sahijpal

Comments: Accepted for MNRAS, 28 Pages, 8 figures, 21 tables in main manuscript and 1 table in supplementary data

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!!!!

[13] [arXiv:2004.11312](#)

Title: "What's in a name: the etymology of astrobiology"

Author:Manasvi Lingam, Abraham Loeb

Comments: 9 pages; 0 figures

Subjects: History and Philosophy of Physics (physics.hist-ph); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[14] [arxive:2004.11225](#)

Title: "Spectroscopic Orbits of Eleven Nearby, Mid-to-Late M Dwarf Binaries"

Author:Jennifer G. Winters, Jonathan M. Irwin, David Charbonneau, David W. Latham, Amber M. Medina, Jessica Mink, Gilbert A. Esquerdo, Perry Berlind, Michael L. Calkins, Zachory K. Berta-Thompson

Comments: Accepted for publication in AJ. Full table of RVs available upon request before publication. Corrected uncertainty on LHS 1817 mass ratio & T_{eff}

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

[理論/観測/実験 etc....]

Comment!!!!

Nature

ない

Science

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