

2020年3月第2週 新着論文サーベイ

3月9日(月曜日)

[1] [arxiv:2003.03349](#)

Title: "A statistical search for Star-Planet Interaction in the UltraViolet using GALEX"

Author: Gayathri Viswanath, Mayank Narang, P. Manoj, Blesson Mathew, Sreeja S Kartha

Comments: 14 pages, 7 figures, 2 tables. Accepted for publication in The Astronomical Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxiv:2003.03292](#)

Title: "Geological Mapping and Chronology of Lunar Landing Sites: Apollo 11"

Author: Wajiha Iqbal, Harald Hiesinger, Carolyn H. van der Bogert

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arxiv:2003.03231](#)

Title: "Atmospheric Escape Processes and Planetary Atmospheric Evolution"

Author: Guillaume Gronoff, Phil Arras, Suleiman M Baraka, Jared M Bell, Gaël Cessateur, Ofer Cohen, Shannon M. Curry, Jeremy J Drake, Meredith K Elrod, Justin T. Erwin, Katherine Garcia-Sage, Cecilia Garraffo, Alex Glocer, Nicholas Gray Heavens, Kylie Lovato, Romain Maggiolo, Christopher D. Parkinson, Cyril L. Simon Wedlund, Daniel R Weimer, William B. Moore

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2003.03116](#)

Title: "Linking studies of tiny meteoroids, zodiacal dust, cometary dust and circumstellar disks"

Author: Anny-Chantal Levasseur-Regourd, Clément Baruteau, Jérémie Lasue, Julien Milli, Jean-Baptiste Renard

Comments: 15 pages, 5 figures, accepted for publication in Planetary and Space Science

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2003.02983](#)

Title: "Ogle-2018-blg-06771b: A super earth near the galactic bulge"

Author: Antonio Herrera-Martín, M. D. Albrow, A. Udalski, A. Gould, Y.-H. Ryu, J. C. Yee, S.-J. Chung, C. Han, K.-H. Hwang, Y. K. Jung, C.-U. Lee, I.-G. Shin, Y. Shvartzvald, W. Zang, S.-M. Cha, D.-J. Kim, H.-W. Kim, S.-L. Kim, D.-J. Lee, Y. Lee, B.-G. Park, R. W. Pogge, M. K. Szymański, P. Mróz, J. Skowron, R. Poleski, I. Soszyński, S. Kozłowski, P. Pietrukowicz, K. Ulaczyk, K. Rybicki, P. Iwanek, M. Wrona

Comments: 14 page, 12 figures, submitted to ApJ

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!!!!

[6] [arXiv:2003.02982](#)

Title: "Effects of scattering, temperature gradients, and settling on the derived dust properties of observed protoplanetary disks"

Author: Anibal Sierra, Susana Lizano

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

[理論/観測/実験 etc....]

Comment!!!!

3月10日(火曜日)

[1] [arXiv:2003.04013](#)

Title: "A LOFAR Observation of Ionospheric Scintillation from Two Simultaneous

Travelling Ionospheric Disturbances”

Author: Richard A. Fallows, Biagio Forte, Ivan Astin, Tom Allbrook, Alex Arnold, Alan Wood, Gareth Dorrian, Maaijke Mevius, Hanna Rothkaehl, Barbara Matyjasiak, Andrzej Krankowski, James M. Anderson, Ashish Asgekar, I. Max Avruch, Mark Bentum, Mario M. Bisi, Harvey R. Butcher, Benedetta Ciardi, Bartosz Dabrowski, Sieds Damstra, Francesco de Gasperin, Sven Duscha, Jochen Eislöffel, Thomas M.O. Franzen, Michael A. Garrett, Jean-Matthias Grietameier, André W. Gunst, Matthias Hoeft, Jörg R. Hörandel, Marco Iacobelli, Huib T. Intema, Leon V.E. Koopmans, Peter Maat, Gottfried Mann, Anna Nelles, Harm Paas, Vishambhar N. Pandey, Wolfgang Reich, Antonia Rowlinson, Mark Ruitter, Dominik J. Schwarz, Maciej Serylak, Aleksander Shulevski, Oleg M. Smirnov, Marian Soida, Matthias Steinmetz

Comments: 24 pages, 16 figures. Accepted for open-access publication in the Journal of Space Weather and Space Climate. For associated movie file, see this [https URL](https://doi.org/10.1029/2018SWD002388)

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxiv:2003.03967](https://arxiv.org/abs/2003.03967)

Title: ”CHO-bearing molecules in Comet 67P/Churyumov-Gerasimenko”

Author: Markus Schuhmann, Kathrin Altwegg, Hans Balsiger, Jean-Jacques Berthelier, Johan De Keyser, Stephen A. Fuselier, Sébastien Gasc, Tamas I. Gombosi, Nora Hänni, Martin Rubin, Thierry Sémon, Chia-Yu Tzou, Susanne F. Wampfler

Comments: This document is the unedited Author’s version of a Submitted Work that was subsequently accepted for publication in ACS Earth and Space Chemistry, copyright © American Chemical Society after peer review. To access the final edited and published work see this [https URL](https://doi.org/10.1021/acs.est.8b01000)

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arxiv:2003.03628](https://arxiv.org/abs/2003.03628)

Title: ”The Atmospheres of Rocky Exoplanets I. Outgassing of Common Rock and the Stability of Liquid Water”

Author: Oliver Herbort, Peter Woitke, Christiane Helling, Aubrey Zerkle

Comments: 19 pages, 13 figures, accepted to A&A
Subjects: Earth and Planetary Astrophysics (astro-ph.EP)
[理論/観測/実験 etc....]
Comment!!!!

[4] [arXiv:2003.03495](#)

Title: "Mass shedding activities of Asteroid (3200) Phaethon enhanced by its rotation"

Author: Ryota Nakano, Masatoshi Hirabayashi

Comments: 10 pages, 4 figures, 1 table; Accepted for publication in ApJL
Subjects: Earth and Planetary Astrophysics (astro-ph.EP)
[理論/観測/実験 etc....]
Comment!!!!

[5] [arXiv:2003.03388](#)

Title: "Sub-Neptune Formation: The View from Resonant Planets"

Author: Nick Choksi, Eugene Chiang

Comments: Submitted to MNRAS
Subjects: Earth and Planetary Astrophysics (astro-ph.EP)
[理論/観測/実験 etc....]
Comment!!!!

[6] [arXiv:2003.04192](#)

Title: "Provenance of the Cross Sign of 806 in the Anglo-Saxon Chronicle: A possible Lunar Halo over Continental Europe?"

Author: Yuta Uchikawa, Les Cowley, Hisashi Hayakawa, David M. Willis, F. Richard Stephenson

Comments: 23 pages, 7 figures, and 1 table; accepted for publication in the HGSS; Figures 1 and 3 is available only in the record version
Subjects: History and Philosophy of Physics (physics.hist-ph); Earth and Planetary Astrophysics (astro-ph.EP); Atmospheric and Oceanic Physics (physics.ao-ph); Geophysics (physics.geo-ph)
[理論/観測/実験 etc....]
Comment!!!!

[7] [arXiv:2003.03499](#)

Title: "The HOSTS survey for exozodiacal dust: Observational results from the complete survey"

Author: Steve Ertel, Denis Defrère, Philip M. Hinz, Bertrand Mennesson, Grant

M. Kennedy, William C. Danchi, Christopher Gelino, John M. Hill, William F. Hoffmann, Johan Mazoyer, George Rieke, Andrew Shannon, Karl Stapelfeldt, Eckhart Spalding, Jordan M. Stone, Amali Vaz, Alycia J. Weinberger, Phil Willems, Olivier Absil, Paul Arbo, Vanessa P. Bailey, Charles Beichman, Geoffrey Bryden, Elwood C. Downey, Olivier Durney, Simone Esposito, Andras Gaspar, Paul Grenz, Chris A. Haniff, Jarron M. Leisenring, Lindsay Marion, Tom J. McMahon, Rafael Millan-Gabet, Oscar M. Montoya, Katie M. Morzinski, Saavidra Perera, Enrico Pinna, Jörg-Uwe Pott, Jennifer Power, Alfio Puglisi, Aki Roberge, Eugene Serabyn, Andrew J. Skemer, Kate Y. L. Su, Vidhya Vaitheeswaran, Mark C. Wyatt

Comments: accepted for publication in AJ

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:2003.03468](#)

Title: "Characterizing the Radio Quiet Region Behind the Lunar Farside for Low Radio Frequency Experiments"

Author: Neil Bassett, David Rapetti, Jack O. Burns, Keith Tauscher, Robert MacDowall

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arxiv:2003.03390](#)

Title: "Most Stars (and Planets?) Are Born in Intense Radiation Fields"

Author: Eve J. Lee, Philip F. Hopkins

Comments: MNRAS Letters in press

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!!!!

3月11日(水曜日)

[1] [arXiv:2003.04877](#)

Title: "Re-inflation of warm and hot Jupiters"

Author: Thaddeus D. Komacek, Daniel P. Thorngren, Eric D. Lopez, Sivan Ginzburg

Comments: 15 pages, 13 figures, accepted at ApJ

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2003.04872](#)

Title: "Modelling the He I triplet absorption at 10830 Angstroms in the atmosphere of HD 209458 b"

Author: M. Lampón, M. López-Puertas, L. M. Lara, A. Sánchez-López, M. Salz, S. Czesla, J. Sanz-Forcada, K. Molaverdikhani, F. J. Alonso-Floriano, L. Nortmann, J. A. Caballero, F. F. Bauer, E. Pallé, D. Montes, A. Quirrenbach, E. Nagel, I. Ribas, A. Reiners, P. J. Amado

Comments: Accepted to A&A. 15 Pages, 15 figures and 3 tables

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:2003.04856](#)

Title: "Searching for Thermal Inversion Agents in the Transmission Spectrum of MASCARA-2b/KELT-20b: Detection of Neutral Iron and Ionised Calcium H&K Lines"

Author: Stevanus K. Nugroho, Neale P. Gibson, Ernst J. W. de Mooij, Chris A. Watson, Hajime Kawahara, Stephanie Merritt

Comments: 20 pages, 16 figures, 3 tables, submitted to MNRAS after addressing reviewer comments

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:2003.04851](#)

Title: "Revisiting the distributions of Jupiter's irregular moons: II. orbital characteristics"

Author: Fabao Gao, Xia Liu

Comments: 25 pages, 8 figures, 19 tables

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Applications (stat.AP)

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2003.04810](#)

Title: "Revisiting the distributions of Jupiter's irregular moons: I. physical characteristics"

Author: Fabao Gao, Xia Liu

Comments: 35 pages, 27 figures, 17 tables

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Applications (stat.AP)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2003.04650](#)

Title: "Detection of Fe I and Fe II in the atmosphere of MASCARA-2b using a cross-correlation method"

Author: M. Stangret, N. Casasayas-Barris, E. Pallé, F. Yan, A. Sánchez-López, M. López-Puertas

Comments: 10 pages, 7 figures

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!!!!

[7] [arXiv:2003.04525](#)

Title: "LHS 1815b: The First Thick-Disk Planet Detected By TESS"

Author: Tianjun Gan, Avi Shporer, John H. Livingston, Karen A. Collins, Shude Mao, Alessandro A. Trani, Davide Gandolfi, Teruyuki Hirano, Rafael Luque, Keivan G. Stassun, Carl Ziegler, Steve B. Howell, Coel Hellier, Jonathan M. Irwin, Jennifer G. Winters, David R. Anderson, César Briceño, Nicholas Law, Andrew W. Mann, Xavier Bonfils, Nicola Astudillo-Defru, Eric L. N. Jensen, Guillem Anglada-Escudé, George R. Ricker, Roland Vanderspek, David W. Latham, Sara Seager, Joshua N. Winn, Jon M. Jenkins, Gabor Furesz, Natalia M. Guerrero, Elisa Quintana, Joseph D. Twicken, Douglas A. Caldwell, Peter Tenenbaum, Chelsea X. Huang, Pamela Rowden, Bárbara Rojas-Ayala

Comments: accepted for publication in AJ

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!!!!

[8] [arXiv:2003.04504](#)

Title: "Probability of simultaneous parallax detection for free-floating planet microlensing events near Galactic Centre"

Author: M. Ban

Comments: 20 pages, 14 figures, 6 tables. Submitted to MNRAS

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA); 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:2003.04397](#)

Title: "Searching the Entirety of Kepler Data. I. 17 New Planet Candidates Including 1 Habitable Zone World"

Author: Michelle Kunimoto, Jaymie M. Matthews, Henry Ngo

Comments: 25 pages, 9 figures, published in The Astronomical Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2003.04348](#)

Title: "Architectures of Exoplanetary Systems. II: An Intrinsic Relation between Planetary System Occurrence and Spectral Type for Kepler's FGK Dwarfs"

Author: Matthias Y. He, Eric B. Ford, Darin Ragozzine

Comments: Submitted to MNRAS; 17 pages, 6 figures, plus supplemental online materials with 3 figures

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

[理論/観測/実験 etc....]

Comment!!!!

3月12日(木曜日)

[1] [arXiv:2003.05397](#)

Title: "A weak spectral signature of water vapour in the atmosphere of HD 179949"

b at high spectral resolution in the L-band”

Author: Rebecca K. Webb, Matteo Brogi, Siddharth Gandhi, Michael R. Line, Jayne L. Birkby, Katy L. Chubb, Ignas A. G. Snellen, Sergey N. Yurchenko

Comments: Accepted for publication in MNRAS; 13 pages, 10 figures

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

[観測/惑星分光]

トランジットを起こさない惑星でも、高分散分光によって RV で変動しているスペクトル成分を取り出すことで惑星の分光観測が可能である。この研究では HD179949b について VLT の CRILES という高分散の赤外分光計で L バンド帯の分光を行った。K バンド帯での先行研究と組み合わせることで水と CO からなる、弱い温度勾配のある大気存在が示唆された。

[2] [arxiv:2003.05366](#)

Title: ”Normalized Angular Momentum Deficit: a tool for comparing the violence of the dynamical histories of planetary systems”

Author: D. Turrini, A. Zinzi, J. A. Belinchon

Comments: 6 pages, 1 table, 3 figures. Submitted to Astronomy & Astrophysics

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

[理論/軌道進化]

惑星の軌道進化の話。NAMD という量に着目し、惑星の軌道離心率や multiplicity との相関を議論した。規格化する前の AMD については既に研究がなされているらしい。

[3] [arxiv:2003.05354](#)

Title: ”Atmospheric compositions and observability of nitrogen dominated ultra-short period super-Earths”

Author: Mantas Zilinskas, Yamila Miguel, Paul Mollière, Shang-Min Tsai

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

[理論/惑星大気]

公転周期が 1 日を切るスーパーアースで、窒素や窒素化合物を含む大気組成とそれが JWST で受かるかどうかのシミュレーションを行った。55Cnc e (公転周期 0.73 日、2 地球半径) をモデルに計算している。どのような窒素化合物の分子輝線が受かるかは N/O 比の他 C/O 比にも関係する。HCN, CN, CO に加え、N/O 比が高いと NH_3 が、N/O 比が低いと C_2H_4 , CH_4 などが受かる。

[4] [arxiv:2003.05121](#)

Title: ”The reliability of the Titius-Bode relation and its implications for the search for exoplanets”

Author: Patricia Lara, Guadalupe Cordero-Tercero, Christine Allen

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

[理論/惑星軌道]

太陽系におけるチチウスボーデの法則を、5つ以上の惑星が見つかった系について拡張させてみる。これらの系のうち4つから法則式の係数を決定すると残りの惑星の存在が予想できるかを試したところ、78%の系で残りの惑星の存在を言い当てることができた。逆に言えば、惑星形成のランダムさによって生じるのが残り22%の法則から合わない系なのだろう、という結論。また、Kepler-186系はハビタブルゾーン内に未発見の惑星か小惑星帯がある可能性がある。

[5] [arXiv:2003.05052](#)

Title: "Formation of single-moon systems around gas giants"

Author: Yuri I. Fujii, Masahiro Ogiwara

Comments: Published in A&A letter

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

[理論/衛星形成 etc....]

周惑星円盤から衛星が形成される時、できた衛星は Type-1 migration によって惑星に落ちるか、その前にガスが散逸して生き残るかのどちらだとされていたが、前者の場合は衛星は残らず後者の場合は木星のように巨大な衛星は複数残るのが自然である。しかし実際は土星のタイタンのように1個の巨大衛星が存在する例がある。円盤内の温度構造を精密に計算したシミュレーションを行うと、円盤内には Type-1 migration が起こりにくくむしろ円盤の外側に力がかかるような領域があり、他の衛星が惑星に落ちてもそのあたりでできた巨大衛星のみ生き残ることができ、タイタンのような例を説明することができる。

[6] [arXiv:2003.05040](#)

Title: "Dynamical instabilities in systems of multiple short-period planets are likely driven by secular chaos: a case study of Kepler-102"

Author: Kathryn Volk, Renu Malhotra

Comments: submitted to AAS journals

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

[理論/軌道進化]

5つの惑星を持つ Kepler-102 系の軌道進化について。この系の惑星たちは軌道共鳴してそうな周期の比ではあるが、そのような兆候が見られない。シミュレーションから、この惑星のうち b は非常にゆっくりと軌道変化している可能性があることが分かった。

[7] [arXiv:2003.04955](#)

Title: "Volatile evolution and atmospheres of Trans-Neptunian Objects"

Author: Leslie A. Young, Felipe Braga-Ribas, Robert E. Johnson

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

[理論/観測/実験 etc....]

TNO の表面の揮発物質や大気についてのレビュー論文。組成や量に制限をつけるためには恒星の掩蔽現象を観測し、本体に隠される直前に大気での減光が受かるか、その時ライトカーブにどのような特徴が出るかを調べる方法が良い。GAIA によって恒星の位置精度が非常に良くなったので、掩蔽現象を観測しやすくなった。

[8] [arXiv:2003.04931](#)

Title: "Resonance in the K2-19 system is at odds with its high reported eccentricities"

Author: Antoine C. Petit, Erik A. Petigura, Melvyn B. Davies, Anders Johansen

Comments: Submitted to MNRAS

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

[理論/軌道共鳴]

K2-19系は2つの惑星が回る内側に1つの惑星が回っている。外側の2惑星はTTVの観測により、3:2の軌道共鳴に近いが、classical resonant angles circulateがあるという理由から実際は共鳴していないとされていた。この論文ではcirculateがあっても共鳴は起こっていること、さらに4番目の惑星がある可能性があることを示唆した。

[9] [arXiv:2003.04904](#)

Title: "Cometary Activity Discovered on a Distant Centaur: A Non-Aqueous Sublimation Mechanism"

Author: Colin Orion Chandler, Jay K. Kueny, Chadwick A. Trujillo, David E. Trilling, William J. Oldroyd

Comments: 19 pages, 4 figures, submitted to Astrophysical Journal Letters

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

[観測/彗星]

ケンタウルス族の天体がアウトバーストを起こして彗星活動を見せることがあるが、その機構は分かっていない。今回のバーストは水が昇華するには遠方すぎる位置での現象であり、質量放出率を含めたモデリングからも CO_2 や NH_3 の揮発だろうと考えられる。ただ分光撮像のデータの種類が足りないので確実ではない。

[10] [arXiv:2003.05407](#)

Title: "Dependence of Intensities of Major Geomagnetic Storms ($Dst \leq -100$ nT) on Associated Solar Wind Parameters"

Author: Gui-Ming Le, Gui-Ang Liu, Ming-Xian Zhao

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

[観測/地磁気嵐]

地磁気嵐は太陽風と相関があると考えられており、過去に起こった大きな地磁気嵐の時の太陽風や地球磁気圏のデータから地磁気嵐の起こる条件を調べた。地球の磁気圏の南向きの磁場ベクトルが長期にわたって大きくなると地磁気嵐が起こるとされてきたが、それは必要条件の1つに過ぎず、太陽風の強さが $3nPa$ を越えているなどの条件も要するらしい。

3月13日(金曜日)

[1] [arXiv:2003.05934](#)

Title: "Unified simulations of planetary formation and atmospheric evolution: Ef-

fects of pebble accretion, giant impacts, and stellar irradiations on super-Earth formation”

Author: Masahiro Ogihara, Yasunori Hori

Comments: 17 pages, 10 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!!!!

[2] [arxive:2003.05932](#)

Title: ”Three Short Period Jupiters from TESS”

Author: L. D. Nielsen, R. Brahm, F. Bouchy, N. Espinoza, O. Turner, S. Rappaport, L. Pearce, G. Ricker, R. Vanderspek, D.W. Latham, S. Seager, J.N. Winn, J.M. Jenkins, J.S. Acton, G. Bakos, T. Barclay, K. Barkaoui, W. Bhatti, C. Briceño, E.M. Bryant, M.R. Burleigh, D.R. Ciardi, K.A. Collins, K.I. Collins, B.F. Cooke, Z. Csubry, L.A. dos Santos, Ph. Eigmüller, M. M. Fausnaugh, T. Gan, M. Gillon, M.R. Goad, N. Guerrero, J. Hagelberg, R. Hart, T. Henning, C.X. Huang, E. Jehin, J.S. Jenkins, A. Jordàn, J.F. Kielkopf, D. Kossakowski, B. Lavie, N. Law, M. Lendl, J.P. de Leon, C. Lovis, A.W. Mann, M. Marmier, J. McCormac, M. Mori, M. Moyano, N. Narita, D. Osip, J.F. Otegi, F. Pepe, F.J. Pozuelos, L. Raynard, H.M. Relles, P. Sarkis, D. Segransan, J.V. Seidel, A. Shporer, M. Stalport, C. Stockdale

Comments: Submitted to 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!!!!

[3] [arxive:2003.05714](#)

Title: ”SPHERE+: Imaging young Jupiters down to the snowline”

Author: A. Boccaletti, G. Chauvin, D. Mouillet, O. Absil, F. Allard, S. Antonucci, J.-C. Augereau, P. Barge, A. Baruffolo, J.-L. Baudino, P. Baudoz, M. Beaulieu, M. Benisty, J.-L. Beuzit, A. Bianco, B. Biller, B. Bonavita, M. Bonnefoy, S. Bos, J.-C. Bouret, W. Brandner, N. Buchschache, B. Carry, F. Cantalloube, E. Cascone, A. Carlotti, B. Charnay, A. Chiavassa, E. Choquet, Y. Clenet, A. Crida, J. De Boer, V. De Caprio, S. Desidera, J.-M. Desert, J.-B. Delisle, P. Delorme, K. Dohlen, D. Doelman, C. Dominik,

V. D Orazi, C. Dougados, S. Doute, D. Fedele, M. Feldt, F. Ferreira, C. Fontanive, T. Fusco, R. Galicher, A. Garufi, E. Gendron, A. Ghedina, C. Ginski, J.-F. Gonzalez, D. Gratadour, R. Gratton, T. Guillot, S. Haffert, J. Hagelberg, T. Henning, E. Huby, M. Janson, I. Kamp, C. Keller, M. Kenworthy

Comments: White paper submitted to ESO on Feb. 20th, 2020

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!!!!

[4] [arXiv:2003.05704](#)

Title: "Venusian Habitable Climate Scenarios: Modeling Venus through time and applications to slowly rotating Venus-Like Exoplanets"

Author: M.J. Way, Anthony, D. Del Genio

Comments: Submitted to Journal of Geophysical Research - Planets. 54 pages, 10 figures, 2 tables

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2003.05576](#)

Title: "The solar nebula origin of (486958) Arrokoth, a primordial contact binary in the Kuiper belt"

Author: W. B. McKinnon, D. C. Richardson, J. C. Marohnic, J. T. Keane, W. M. Grundy, D. P. Hamilton, D. Nesvorny, O. M. Umurhan, T. R. Lauer, K. N. Singer, S. A. Stern, H. A. Weaver, J. R. Spencer, M. W. Buie, J. M. Moore, J. J. Kavelaars, C. M. Lisse, X. Mao, A. H. Parker, S. B. Porter, M. R. Showalter, C. B. Olkin, D. P. Cruikshank, H. A. Elliott, G. R. Gladstone, J. W. Parker, A. J. Verbiscer, L. A. Young, New Horizons Science Team

Comments: Published in Science 28 Feb 2020 (First release 13 Feb 2020)

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2003.05528](#)

Title: "Nightside condensation of iron in an ultra-hot giant exoplanet"

Author: David Ehrenreich, Christophe Lovis, Romain Allart, María Rosa Zapatero Osorio, Francesco Pepe, Stefano Cristiani, Rafael Rebolo, Nuno C. Santos, Francesco Borsa, Olivier Demangeon, Xavier Dumusque, Jonay I. González Hernández, Núria Casasayas-Barris, Damien Ségransan, Sérgio Sousa, Manuel Abreu, Vardan Adibekyan, Michael Affolter, Carlos Allende Prieto, Yann Alibert, Matteo Aliverti, David Alves, Manuel Amate, Gerardo Avila, Veronica Baldini, Timothy Bandy, Willy Benz, Andrea Bianco, Émeline Bolmont, François Bouchy, Vincent Bourrier, Christopher Broeg, Alexandre Cabral, Giorgio Calderone, Enric Pallé, H. M. Cegla, Roberto Cirami, João M. P. Coelho, Paolo Conconi, Igor Coretti, Claudio Cumani, Guido Cupani, Hans Dekker, Bernard Delabre, Sebastian Deiries

Comments: Published in Nature (Accepted on 24 January 2020.) 33 pages, 11 figures, 3 tables

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:2003.05499](#)

Title: "Asteroids' Size Distribution and Colors from HiTS"

Author: J. Peña, C. Fuentes, F. Förster, J. Martínez-Palomera, G. Cabrera-Vives, J.C. Maureira, P. Huijse, P.A. Estévez, L. Galbany, S. González-Gaitán, Th. de Jaeger

Comments: 17 pages, 18 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2003.05486](#)

Title: "Subsolar Al/Si and Mg/Si ratios of non-carbonaceous chondrites reveal planetesimal formation during early condensation in the protoplanetary disk"

Author: A. Morbidelli, G. Libourel, H. Palme, S.A. Jacobson, D.C. Rubie

Comments: Accepted for publication in EPSL

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arxiv:2003.05458](#)

Title: "Realistic gravitational focusing of meteoroid streams"

Author: Althea V. Moorhead, Tiffany D. Clements, Denis Vida

Comments: Accepted for publication by Monthly Notices of the Royal Astronomical Society

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

[理論/観測/実験 etc....]

Comment!!!!

Nature

ない

Science

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