

2020年 12月 第3週 新着論文サーベイ

12月 14日 (月曜日)

[1] [arXiv:2012.06455](#)

Title: "Internal water storage capacity of terrestrial planets and the effect of hydration on the M-R relation"

Author: Oliver Shah, Yann Alibert, Ravit Helled, Klaus Mezger

Comments: 34 pages

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2012.06438](#)

Title: "Multiple zonal jets in a turbulent Jovian dynamo model"

Author: T. Gastine, J. Wicht

Comments: 22 pages, 16 figures, 2 tables, submitted to Icarus

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2012.06174](#)

Title: "Departure from the Exact Location of Mean Motion Resonances Induced by the Gas Disk in the Systems Observed by Kepler"

Author: Su Wang, D. N. C. Lin, Xiaochen Zheng, Jianghui Ji

Comments: 18 pages, 7 figures, accepted for publication in AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2012.06042](#)

Title: "NEO Population, Velocity Bias, and Impact Risk from an ATLAS Analysis"

Author: A. N. Heinze, Larry Denneau, John L. Tonry, Steven J. Smartt, Nicolas Erasmus, Alan Fitzsimmons, James E. Robinson, Henry Weiland, Heather

Flewelling, Brian Stalder, Armin Rest, David R. Young

Comments: 23 pages, 11 figures, accepted by the Planetary Science Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2012.05927](#)

Title: "The TW Hya Rosetta Stone Project III: Resolving the Gaseous Thermal Profile of the Disk"

Author: Jenny Calahan, Edwin Bergin, Ke Zhang, Richard Teague, Ilseidore Cleeves, Jennifer Bergner, Geoffrey A. Blake, Paolo Cazzoletti, Viviana Guzman, Michiel R. Hogerheijde, Jane Huang, Mihkel Kama, Ryan Loomis, Karin Oberg, Ewine F. van Dishoeck, Jeroen Terwisscha van Scheltinga, Catherine Walsh, David Wilner, Charlie Qi

Comments: 28 pages, 12 main figures, 14 appendix figures. Accepted to ApJ

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2012.05922](#)

Title: "Stellar Winds Drive Strong Variations in Exoplanet Evaporative Outflows and Transit Absorption Signatures"

Author: Laura M. Harbach, Sofia P. Moschou, Cecilia Garraffo, Jeremy J. Drake, Julián D. Alvarado-Gómez, Ofer Cohen, Federico Fraschetti

Comments: Submitted to ApJ. 18 pages, 7 figures

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!!!!

[7] [arXiv:2012.06317](#)

Title: "Lunar Volatiles and Solar System Science"

Author: Parvathy Prem, Ákos Kereszturi, Ariel N. Deutsch, Charles A. Hibbitts, Carl A. Schmidt, Cesare Grava, Casey I. Honniball, Craig J. Hardgrove, Carlé M. Pieters, David B. Goldstein, Donald C. Barker, Debra H. Needham, Dana M. Hurley, Erwan Mazarico, Gerardo Dominguez, G. Wesley Patterson, Georgiana Y. Kramer, Julie Brisset, Jeffrey J. Gillis-Davis,

Julie L. Mitchell, Jamey R. Szalay, Jasper S. Halekas, James T. Keane, James W. Head, Kathleen E. Mandt, Katharine L. Robinson, Kristen M. Luchsinger, Lizeth O. Magaña, Matthew A. Siegler, Margaret E. Landis, Michael J. Poston, Noah E. Petro, Paul G. Lucey, Rosemary M. Killen, Shuai Li, Shyama Narendranath, Shashwat Shukla, Thomas J. Barrett, Timothy J. Stubbs, Thomas M. Orlando, William M. Farrell

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

[理論/観測/実験 etc....]

Comment!!!!

12月15日(火曜日)

[1] [arxiv:2012.07683](#)

Title: "On the oligarchic growth in a fully interacting system"

Author: Z. Dencs, Zs. Regaly

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

[理論]

惑星形成のシミュレーションにおいては多数の微惑星や embryo などの重力相互作用を計算しなければならず負荷が大きい。この負荷を減らすために新たな計算手法を提案した。

[2] [arxiv:2012.07478](#)

Title: "ExoClock Project: An open platform for monitoring the ephemerides of Ariel targets with contributions from the public"

Author: Anastasia Kokori, Angelos Tsiaras, Billy Edwards, Marco Rocchetto, Giovanna Tinetti, Anaël Wünsche, Nikolaos Paschalis, Vikrant Kumar Agnihotri, Matthieu Bachschmidt, Marc Bretton, Hamish Caines, Mauro Caló, Roland Casali, Martin Crow, Simon Dawes, Marc Deldem, Dimitrios Deligeorgopoulos, Roger Dymock, Phil Evans, Carmelo Falco, Stephane Ferratfiat, Martin Fowler, Stephen Futcher, Pere Guerra, Francois Hurter, Adrian Jones, Wonseok Kang, Taewoo Kim, Richard Lee, Claudio Lopresti, Antonio Marino, Matthias Mallonn, Fabio Mortari, Mario Morvan, Lorenzo V. Mugnai, Alessandro Nastasi, Valère Perroud, Cédric Pereira, Mark Phillips, Pavel Pintr, Manfred Raetz, Francois Regembal, John Savage, Danilo Sedita, Nick Sioulas, Iakovos Strikis, Geoffrey Thurston, Andrea Tomacelli

Comments: 33 pages, 3 figures, 3 tables, accepted for publication in Experimental Astronomy, data available through OSF at DOI: 10.17605/OSF.IO/3W7HM

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arxiv:2012.07337](#)

Title: "Lava Worlds: From Early Earth to Exoplanets"

Author:Keng-Hsien Chao, Rebecca deGraffenried, Mackenzie Lach, William Nelson, Kelly Truax, Eric Gaidos

Comments: Accepted, invited review for Geochemistry. This entry will be updated with journal reference and DOI when available

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arxiv:2012.07141](#)

Title: "Nature of bright C-complex asteroids"

Author:Sunao Hasegawa, Toshihiro Kasuga, Fumihiko Usui, Daisuke Kuroda

Comments: 20 pages, 5 figures, and 6 table, accepted for publication in PASJ

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxiv:2012.06833](#)

Title: "Astrometric and photometric observations of comet 29P/Schwassmann–Wachmann 1 at the Sanglokh international astronomical observatory"

Author:G.I. Kokhirova, O.V. Ivanova, F. Dzh. Rakhmatullaeva, A.M. Buriev, U.Kh. Khamroev

Comments: 7 pages, 5 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arxiv:2012.06781](#)

Title: "First approximation for spacecraft motion relative to (99942) Apophis"

Author:S. Aljbaae, D. M. Sanchez, A. F. B. A. Prado, J. Souchay, M. O. Terra,

R. B. Negri, L. O. Marchi

Comments: 24 pages, 20 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arxiv:2012.06740](#)

Title: "Vertical Structure and Color of Jovian Latitudinal Cloud Bands during the Juno Era"

Author: Emma K. Dahl, Nancy J. Chanover, Glenn S. Orton, Kevin H. Baines, James A. Sinclair, David G. Voelz, Erandi A. Wijerathna, Paul D. Strycker, Patrick G. J. Irwin

Comments: 38 pages, 21 figures; Accepted for publication in AAS Planetary Science Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arxiv:2012.06700](#)

Title: "Planetesimal formation around the snow line II: dust or pebbles?"

Author: Ryuki Hyodo, Tristan Guillot, Shigeru Ida, Satoshi Okuzumi, Andrew N. Youdin

Comments: 18 pages, 6 Figures, 3 Figures in Appendix, accepted for publication in Astronomy & Astrophysics (A&A)

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

[理論]

原始惑星系円盤のスノーライン付近での、ダストと氷の pebble との相互作用を調べた。

[9] [arxiv:2012.06641](#)

Title: "Boundary Layer Circumplanetary Accretion: How Fast Could an Unmagnetized Planet Spin Up Through Its Disk?"

Author: Jiayin Dong, Yan-Fei Jiang, Phil Armitage

Comments: 15 pages, 11 figures, submitted to AAS Journals

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

[理論]

周惑星円盤から惑星にガスが降着するとき、角運動量保存によって惑星の自転が加速される。このようなプロセスを定量的にシミュレーションした。

[10] [arXiv:2012.06621](#)

Title: "The 2017 May 20th stellar occultation by the elongated centaur (95626) 2002 GZ₃₂"

Author: P. Santos-Sanz, J. L. Ortiz, B. Sicardy, G. Benedetti-Rossi, N. Morales, E. Fernández-Valenzuela, R. Duffard, R. Iglesias-Marzoa, J.L. Lamadrid, N. Maícas, L. Pérez, K. Gazeas, J.C. Guirado, V. Peris, F.J. Ballesteros, F. Organero, L. Ana-Hernández, F. Fonseca, A. Alvarez-Candal, Y. Jiménez-Teja, M. Vara-Lubiano, F. Braga-Ribas, J.I.B. Camargo, J. Desmars, M. Assafin, R. Vieira-Martins, J. Alikakos, M. Boutet, M. Bretton, A. Carbognani, V. Charmandaris, F. Ciabattari, P. Delincak, A. Fuambuena Leiva, H. González, T. Haymes, S. Hellmich, J. Horbowicz, M. Jennings, B. Kattentidt, Cs. Kiss, R. Komžík, J. Lecacheux, A. Marciniak, S. Moin-drot, S. Mottola, A. Pal, N. Paschalis, S. Pastor, C. Perello, T. Pribulla, C. Ratinaud, J.A. Reyes, J. Sanchez, C. Schnabel

Comments: Accepted for publication in MNRAS (8-Dec.-2020), 15 pages, 9 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:2012.07667](#)

Title: "ALMA chemical survey of disk-outflow sources in Taurus (ALMA-DOT) V: Sample, overview, and demography of disk molecular emission"

Author: Antonio Garufi, Linda Podio, Claudio Codella, Davide Fedele, Eleonora Bianchi, Cecile Favre, Francesca Bacciotti, Cecilia Ceccarelli, Seyma Mercimek, Kazi Rygl, Richard Teague, Leonardo Testi

Comments: Accepted for publication by A&A, 16 pages, 9 figures

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!!!!

[12] [arXiv:2012.07518](#)

Title: "Electric-quadrupole and magnetic-dipole contributions to the n₂+n₃ band of carbon dioxide near 3.3 micron"

Author: H el ene Fleurbaey, Roberto Grilli, Didier Mondelain, Samir Kassi, Alain Campargue

Subjects:

Chemical Physics (physics.chem-ph); Earth and Planetary Astrophysics (astro-ph.EP); Instrumentation and Methods for Astrophysics (astro-ph.IM); Optics (physics.optics)

[理論/観測/実験 etc....]

Comment!!!!

[13] [arxive:2012.07137](#)

Title: "Optimizing MARVEL for the radial velocity follow-up of TESS and PLATO transiting exoplanets"

Author: Cyprien Lanthermann, Joris De Ridder, Hugues Sana, Pierre Royer, Denis Defrère, Gert Raskin, Bart Vandenbussche, Andrew Tkachenko, Hans Van Winckel

Comments: 6 pages, 5 figures, SPIE conference proceeding

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

[理論/観測/実験 etc....]

Comment!!!!

12月16日(水曜日)

[1] [arxive:2012.08497](#)

Title: "Dynamics of the CO+ coma of comet 29P/Schwassmann-Wachmann 1"

Author: O. Ivanova, O. Agapitov, D. Odstrcil, P. Korsun, V. Afanasiev, V. Rosenbush

Comments: 7 pages, 5 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxive:2012.08434](#)

Title: "Dust productivity and impact collision of the asteroid (596) Scheila"

Author: L. Neslusan, O. Ivanova, M. Husarik, J. Svoren, Z. Seman Krisandova

Comments: 6 pages, 3 figures, 3 tables

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2012.08430](#)

Title: "Results of Complex Observations of Asteroid (596) Scheila at the Sanglokh International Astronomical Observatory"

Author:G.I. Kokhirova, O.V. Ivanova, F.Dzh. Rakhmatullaeva, U.Kh. Khamroev, M. Burieva, S.Kh. Abdulloev

Comments: 10 pages, 5 figures. arXiv admin note: text overlap with arXiv:2012.06833

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2012.08308](#)

Title: "Revealing Giant Planet Interiors Beneath the Cloudy Veil"

Author:Tristan Guillot, Leigh Fletcher

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:2012.08184](#)

Title: "Are There Transit Timing Variations for the Exoplanet Qatar-1b ?"

Author:Li-Hsin Su, Ing-Guey Jiang, Devesh P. Sariya, Chiao-Yu Lee, Li-Chin Yeh, Vineet Kumar Mannaday, Parijat Thakur, D. K. Sahu, Swadesh Chand, A. A. Shlyapnikov, V. V. Moskvina, Vladimir Ignatov, David Mkrtichian, Evgeny Griv

Comments: typo corrected, 24 pages, 5 tables, 5 figures, accepted by AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2012.08175](#)

Title: "Machine Learning for automatic identification of new minor species"

Author:Frederic Schmidt, Guillaume Cruz Mermy, Justin Erwin, Severine Robert, Lori Neary, Ian R. Thomas, Frank Daerden, Bojan Ristic, Manish R. Patel, Giancarlo Bellucci, Jose-Juan Lopez-Moreno, Ann-Carine Vandaele

Comments: 26 pages, 10 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2012.07996](#)

Title: "Effects of Spin-Orbit Resonances and Tidal Heating on the Inner Edge of the Habitable Zone"

Author: Christopher M. Colose, Jacob Haqq-Misra, Eric T. Wolf, Anthony D. Del Genio, Rory Barnes, Michael J. Way, Reto Ruedy

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2012.07957](#)

Title: "A Guide to Realistic Uncertainties on Fundamental Properties of Solar-Type Exoplanet Host Stars"

Author: Jamie Tayar, Zachary R. Claytor, Daniel Huber, Jennifer van Saders

Comments: Submitted, 11 pages, 6 figures. Google colab notebook available at this [https](https://colab.research.google.com/) URL

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arXiv:2012.07932](#)

Title: "Origin and dynamical evolution of the asteroid belt"

Author: Sean N. Raymond, David Nesvorny

Comments: Chapter to appear in *Vesta and Ceres: Insights into the Dawn of the Solar System* (Cambridge U. Press; Editors Simone Marchi, Carol A. Raymond, and Christopher T. Russell)

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2012.07926](#)

Title: "The search for radio emission from the exoplanetary systems 55 Cancri, ν Andromedae, and τ Boötis using LOFAR beam-formed observations"

Author: Jake D. Turner, Philippe Zarka, Jean-Mathias Grießmeier, Joseph Lazio, Baptiste Cecconi, J. Emilio Enriquez, Julien N. Girard, Ray Jayawardhana, Laurent Lamy, Jonathan D. Nichols, Imke de Pater

Comments: Accepted for publication in *A&A* (Oct. 22, 2020). 29 pages (15 pgs main text), 17 figures, 8 tables, 10 appendices

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:2012.07854](#)

Title: "Circularization of tidal debris around white dwarfs: implications for gas production and dust variability"

Author: Uri Malamud, Evgeni Grishin, Marc Brouwers

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:2012.07848](#)

Title: "High resolution observations of molecular emission lines toward the CI Tau proto-planetary disc: planet-carved gaps or shadowing?"

Author: Giovanni P. Rosotti, John D. Ilee, Stefano Facchini, Marco Tazzari, Richard Booth, Cathie Clarke, Mihkel Kama

Comments: 17 pages, 17 figures; accepted for publication in MNRAS

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!!!!

[13] [arXiv:2012.08127](#)

Title: "Pebbles in an Embedded Protostellar Disk: The Case of CB26"

Author: Chuan-Peng Zhang, Ralf Launhardt, Yao Liu, John J. Tobin, Thomas Henning

Comments: Accepted for publication in A 17 pages, 14 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[14] [arXiv:2012.07901](#)

Title: "Planet formation in intermediate-separation binary systems"

Author: O. Panić, T. J. Haworth, M. G. Petr-Gotzens, J. Miley, M. van den Ancker, M. Vioque, L. Siess, R. Parker, C. J. Clarke, I. Kamp, G. Kennedy, R. D. Oudmaijer, I. Pascucci, A. M. S. Richards, T. Ratzka, C. Qi

Comments: 12 pages. Accepted for publication in MNRAS

Subjects:

[理論/観測/実験 etc....]

Comment!!!!

12月17日(木曜日)

[1] [arXiv:2012.09008](#)

Title: "Photometric investigations of distant comets C/2002 VQ94 (LINEAR) and 29P/Schwassmann-Wachmann-1"

Author: A.V. Ivanova, P.P. Korsun, V.L. Afanasiev

Comments: 10 pages, 3 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2012.09007](#)

Title: "The Rotation Period of Comet 29P/Schwassmann-Wachmann 1 Determined from the Dust Structures (Jets) in the Coma"

Author: A.V. Ivanova, V.L. Afanasiev, P.P. Korsun, A.R. Baranskii, M.V. Andreev, V.A. Ponomarenko

Comments: 7 pages, 5 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2012.08946](#)

Title: "Mars2020 and Mars Sample Return"

Author: Adrian J. Brown

Comments: 6 pages, 1 figure

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2012.08820](#)

Title: "Non-Sinusoidal Transit Timing Variations for the Exoplanet HAT-P-12b"

Author: Devesh P. Sariya, Ing-Guey Jiang, Li-Hsin Su, Li-Chin Yeh, Tze-En

Chang, V. V. Moskvina, A. A. Shlyapnikov, V. Ignatov, David Mkr-tichian, Evgeny Griv, Vineet Kumar Mannaday, Parijat Thakur, D. K. Sahu, Swadesh Chand, D. Bisht, Zhao Sun, Jianghui Ji

Comments: 19 pages, 7 tables, 6 figures, accepted by RAA

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2012.08771](#)

Title: "Spin Change of Asteroid 2012 TC4 probably by Radiation Torques"

Author: Hee-Jae Lee, Josef Ďurech, David Vokrouhlický, Petr Pravec, Hong-Kyu Moon, William Ryan, Myung-Jin Kim, Chun-Hwey Kim, Young-Jun Choi, Paolo Bacci, Joe Pollock, Rolf Apitzsch

Comments: 29 pages, 17 figures, Accepted for publication in AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2012.08744](#)

Title: "Revisiting KELT-19Ab, WASP-156b and WASP-121b in the TESS Era"

Author: Fan Yang, Ranga-Ram Chary, Ji-Feng Liu

Comments: After addressing referee suggestions

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:2012.08582](#)

Title: "Oxidation Processes Diversify the Metabolic Menu on Enceladus"

Author: Christine Ray, Christopher R. Glein, J. Hunter Waite, Ben Teolis, Tori Hoehler, Julie A. Huber, Jonathan Lunine, Frank Postberg

Comments: Accepted to Icarus 2 December 2020

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2012.09105](#)

Title: "Design of the Life Signature Detection Polarimeter LSDpol"

Author: Christoph U. Keller, Frans Snik, C. H. Lucas Patty, Dora Klindžić,

Mariya Krasteva, David S. Doelman, Thomas Wijnen, Vidhya Pallichadath, Daphne M. Stam, Brice-Olivier Demory, Jonas G. Kühn, H. Jens Hoeijmakers, Antoine Pommerol, Olivier Poch

Comments: 10 pages, 10 figures, SPIE Proceedings 11443-167

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:2012.08972](#)

Title: "Systematics-insensitive Periodogram for finding periods in TESS observations of long-period rotators"

Author: Christina Hedges, Ruth Angus, Geert Barentsen, Nicholas Saunders, Benjamin T. Montet, Michael Gully-Santiago

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!!!!

[10] [arXiv:2012.08675](#)

Title: "The Planet as Exoplanet Analog Spectrograph (PEAS): Design and First-Light"

Author: Emily C. Martin, Andrew J. Skemer, Matthew V. Radovan, Steven L. Allen, David Black, William T. S. Deich, Jonathan J. Fortney, Gabriel Kruglikov, Nicholas MacDonald, David Marques, Evan C. Morris, Andrew C. Phillips, Dale Sandford, Julissa Villalobos Valencia, Jason J. Wang, Pavl Zachary

Comments: SPIE Astronomical Telescopes & Instrumentation 2020 Proceedings (11447-153), 9 pages, 9 figures

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

[理論/観測/実験 etc....]

Comment!!!!

12月18日(金曜日)

[1] [arXiv:2012.09620](#)

Title: "Analytical Solution to the Zonal Harmonics Problem Using Koopman Operator Theory"

Author: David Arnas, Richard Linares

Comments: 29 pages, 11 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2012.09454](#)

Title: "Benchmarking the ab initio hydrogen equations of state for the interior structure of Jupiter"

Author: S. Mazevet, A. Licari, F. Soubiran

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2012.09431](#)

Title: "On the Scaling and Spacing of Extra-Solar Multi-Planet Systems"

Author: Li-Chin Yeh, Ing-Guey Jiang, Sridhar Gajendran

Comments: 22 pages, 6 figures, published in Astrophysics and Space Science

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2012.09288](#)

Title: "Saturn's Seasonal Atmosphere at Northern Summer Solstice"

Author: L.N. Fletcher, L. Sromovsky, V. Hue, J.I. Moses, S. Guerlet, R.A. West, T. Koskinen

Comments: 24 pages, 18 figures, submitted for publication by Cambridge University Press as part of a multi-volume work edited by Kevin Baines, Michael Flasar, Norbert Krupp, and Thomas Stallard, entitled "Cassini at Saturn: The Grand Finale." The copy of the Chapter, as displayed on this website, is a draft, pre-publication copy only

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2012.09240](#)

Title: "Space Occupancy in Low-Earth Orbit"

Author: Claudio Bombardelli, Gabriele Falco, Davide Amato, Aaron J. Rosengren

Comments: Submitted to The Journal of Guidance, Control, and Dynamics

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Dynamical Systems (math.DS)

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:2012.09239](#)

Title: "The Influence of Age on the Relative Frequency of Super-Earths and Sub-Neptunes"

Author: Angeli Sandoval, Gabriella Contardo, Trevor J. David

Comments: 7 pages, 5 figures, 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:2012.09217](#)

Title: "Modeling the nonaxisymmetric structure in the HD 163296 disk with planet-disk interaction"

Author: Peter J. Rodenkirch, Thomas Rometsch, Cornelis P. Dullemond, Philipp Weber, Wilhelm Kley

Comments: Accepted for publication in Astronomy & Astrophysics

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2012.09190](#)

Title: "Understanding the Impacts of Stellar Companions on Planet Formation and Evolution: A Survey of Stellar and Planetary Companions within 25 pc"

Author: Lea A. Hirsch, Lee Rosenthal, Benjamin J. Fulton, Andrew W. Howard, David R. Ciardi, Geoffrey W. Marcy, Eric L. Nielsen, Erik A. Petigura, Robert J. de Rosa, Howard Isaacson, Lauren M. Weiss, Evan Sinukoff, Bruce Macintosh

Comments: 58 pages, 13 figures, accepted to The Astronomical 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....]

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[9] [arxive:2012.09744](#)

Title: "The Tierras Observatory: An ultra-precise photometer to characterize nearby terrestrial exoplanets"

Author: Juliana García-Mejía, David Charbonneau, Daniel Fabricant, Jonathan M. Irwin, Robert Fata, Joseph M. Zujac, Peter E. Doherty

Comments: SPIE Astronomical Telescopes & Instrumentation 2020 Proceedings (11445-168), 20 pages, 11 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arxive:2012.09166](#)

Title: "Proplyds in the Flame Nebula NGC 2024"

Author: Thomas J. Haworth, Jinyoung S. Kim, Andrew J. Winter, Dean C. Hines, Cathie J. Clarke, Andrew D. Sellek, Giulia Ballabio, Karl R. Stapelfeldt

Comments: 14 pages, Accepted for publication in MNRAS

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....]

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