

2020年 11月 第4週 新着論文サーベイ

11月 23日 (月曜日)

[1] [arxiv:2011.10558](#)

Title: "Evidence for chromium hydride in the atmosphere of Hot Jupiter WASP-31b"

Author: M. Braam, F. F. S. van der Tak, K. L. Chubb, M. Min

Comments: 12 pages, 6 figures, 9 tables (Submitted to A&A)

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

[理論/観測/実験 etc....]

Hot Jupiter, 特に WASP-31b の透過スペクトルから、どのような大気中に化学種が存在するかを議論した論文。その結果 WASP-31b の大気中には CrH と H₂O と K が存在すると考えるとスペクトルをよく説明出来ることが分かった。hot jupiter 中で CrH を発見したのは初らしい。

[2] [arxiv:2011.10459](#)

Title: "1D atmospheric study of the temperate sub-Neptune K2-18b"

Author: Doriann Blain, Benjamin Charnay, Bruno Bézard

Comments: Accepted for publication in Astronomy Exo-REM code and k-coefficients tables available here: [this https URL](https://github.com/doriannblain/exo-rem)

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

[理論/観測/実験 etc....]

地球の 2 倍から 10 倍くらいの質量の系外惑星の大気組成はあまりよくわかっていない。その例としてハビタブルゾーン内にある K2-18b がある。透過光スペクトルから H₂O、H₂ と He の大気が存在することは以前から分かっていた。この研究では 1 次元の輻射平衡モデルを用いて K2-18b の大気をシミュレーションした。重要な結果としては、この惑星は HZ 内で初めて大気中に H₂O が見つかったとして有名だったが、H₂O の吸収より CH₄ の吸収が支配的だと思った方がスペクトルをしっかり説明できることが分かった。

[3] [arxiv:2011.10430](#)

Title: "Orbital evolution of potentially habitable planets of tidally interacting binary stars"

Author: David E. Graham, David P. Fleming, Rory Barnes

Comments: 10 pages, 7 figures

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

[理論/観測/実験 etc....]

短周期 (8 日以下) の連星の潮汐進化をシミュレーションして、軌道振動、恒星内部のサイクル、その連星の周りを周回する惑星の軌道安定性を調べた論文。

[4] [arXiv:2011.10424](#)

Title: "Methane as a dominant absorber in the habitable-zone sub-Neptune K2-18 b"

Author: Bruno Bézard, Benjamin Charnay, Doriann Blain

Comments: Submitted to Nature Astronomy ("Matters Arising")

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

[理論/観測/実験 etc....]

2個前の論文と作者同じ。若干詳しく説明されてる。そもそも K2-18 に H₂O があると思ったのは 1.4 マイクロメートルの所に吸収が見られたからとのことだが、メタンでもこの吸収を説明でき、この惑星の温度などを考慮してあげると、メタンのほうが整合的だとのこと。

[5] [arXiv:2011.10380](#)

Title: "Establishing Earth's Minimoons Population through Characterization of Asteroid 2020 CD₃"

Author: Grigori Fedorets, Marco Micheli, Robert Jedicke, Shantanu P. Naidu, Davide Farnocchia, Mikael Granvik, Nicholas Moskovitz, Megan E. Schwamb, Robert Weryk, Kacper Wierzchoś, Eric Christensen, Theodore Pruyne, William F. Bottke, Quanzhi Ye, Richard Wainscoat, Maxime Devogèle, Laura E. Buchanan, Anlaug Amanda Djupvik, Daniel M. Faes, Dora Föhring, Joel Roediger, Tom Secull, Adam B. Smith

Comments: 22 pages, 6 Figures, 5 Tables, to appear in the Astronomical Journal

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

[理論/観測/実験 etc....]

2020 CD₃ という一時的に地球を周回していた小惑星の特徴をまとめた論文。人工物では？という疑いもあったが、測光観測からシリケートなどが有るとわかり、天然のものだとわかった。大きさは 1.5m ほど。理論予測よりも長い時間 (2.7 年) 地球を周回し続けたとのこと。月の影響らしい。

[6] [arXiv:2011.10184](#)

Title: "A Deep Search for Emission From "Rock Comet" (3200) Phaethon At 1 AU"

Author: Quanzhi Ye, Matthew M. Knight, Michael S. P. Kelley, Nicholas A. Moskovitz, Annika Gustafsson, David Schleicher

Comments: PSJ in press

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

[理論/観測/実験 etc....]

ふたご座流星群の母天体だと考えられているファエトンという地球近傍小惑星を 4.3 m Lowell Discovery Telescope で観測したのを解析しましたという論文。

[7] [arXiv:2011.10517](#)

Title: "Quantifying Ionospheric Effects on Global 21-cm Observations"

Author: Emma Shen, Dominic Anstey, Eloy de Lera Acedo, Anastasia Fialkov, Will Handley

Comments: 11 pages, 13 figures, 4 tables

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....]

電離層が 21cm 線にどのような影響を及ぼすかを、2 層モデルで地球の電離層を近似してしらべた論文。状況によっては電離層を通る際に 21cm 線はゆがめられ得るらしいので、地上から観測する際はこのゆがみの効果を考慮しなければならないらしい。

[8] [arXiv:2011.10086](#)

Title: "Evaluation of investigational paradigms for the discovery of non-canonical astrophysical phenomena"

Author: Caitlyn A. K. Singam, Jacob Haqq-Misra, Amedeo Balbi, Alexander M. Sessa, Beatriz Villarroel, Gabriel G. De la Torre, David Grinspoon, Hikaru Furukawa, Virisha Timmaraju

Comments: A product of the TechnoClimes 2020 conference

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP); Data Analysis, Statistics and Probability (physics.data-an); Applications (stat.AP)

[理論/観測/実験 etc....]

ノンカノニカルな現象（理論で説明できない現象や、以前観測したものと整合的でない現象）にたいしてどういうアプローチをとるべきかを考えた論文。

[9] [arXiv:2011.10085](#)

Title: "Correcting the effect of stellar spots on ARIEL transmission spectra"

Author: Gianluca Cracchiolo, Giuseppina Micela, Giovanni Peres

Comments: 16 pages, 13 figures

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

[理論/観測/実験 etc....]

系外惑星をトランジット?で観測する際に stellar spot（太陽でいう黒点）によってどの程度邪魔されるのかを調べるのを目的とした論文。stellar spot の効果を入れた上で恒星のスペクトルを再現できるモデルを構築したらしい。

[10] [arXiv:2011.10062](#)

Title: "Data-Driven Inference of Stellar Surface Gravities for Cool Stars from Photometric Light Curves"

Author: Maryum Sayeed, Daniel Huber, Adam Wheeler, Melissa Ness

Comments: 21 pages, 14 figures, 4 tables, submitted to AJ

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!!!!

11月24日(火曜日)

[1] [arxiv:2011.11560](#)

Title: "The Magellan-TESS Survey I: Survey Description and Mid-Survey Results"

Author: Johanna Teske, Sharon Xuesong Wang, Angie Wolfgang, Tianjun Gan, Mykhaylo Plotnykov, David J. Armstrong, R. Paul Butler, Bryson Cale, Jeffrey D. Crane, Ward Howard, Eric L. N. Jensen, Nicholas Law, Stephen A. Sheckman, Peter Plavchan, Diana Valencia, Andrew Vanderburg, George Ricker, Roland Vanderspek, Dave W. Latham, Sara Seager, Joshua W. Winn, Jon M. Jenkins, Vardan Adibekyan, David Barrado, Susana C. C. Barros, David J. A. Brown, Edward M. Bryant, Jennifer Burt, Douglas A. Caldwell, David Charbonneau, Ryan Cloutier, Karen A. Collins, Kevin I. Collins, Nicole D. Colon, Dennis M. Conti, Olivier D. S. Demangeon, Jason D. Eastman, Mohammed Elmufti, Fabo Feng, Erin Flowers, Natalia M. Guerrero, Saeed Hojjatpanah, Jonathan M. Irwin, Giovanni Isopi, Jorge Lillo-Box, Franco Mallia, Bob Massey

Comments: 101 pages (39 of main text and references, the rest an appendix of figures and tables). 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!!!!

[2] [arxiv:2011.11553](#)

Title: "Formation and dynamics of water clouds on temperate sub-Neptunes: the example of K2-18b"

Author: Benjamin Charnay, Doriann Blain, Bruno Bézard, Jérémy Leconte, Martin Turbet

Comments: Resubmitted to A&A after minor revisions. 16 pages, 14 figures

Subjects:

Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2011.11513](#)

Title: "An N-body population synthesis framework for the formation of moons around Jupiter-like planets"

Author: Marco Cilibrasi, Judit Szulágyi, Simon L. Grimm, Lucio Mayer

Comments: Submitted to MNRAS, comments are welcome

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2011.11458](#)

Title: "TOI-519 b: a short-period substellar object around an M dwarf validated using multicolour photometry and phase curve analysis"

Author: H. Parviainen, E. Pallé, M.R. Zapatero-Osorio, G. Nowak, A. Fukui, F. Murgas, N. Narita, K.G. Stassun, J.H. Livingston, K.A. Collins, D. Hidalgo Soto, V.J.S. Béjar, J. Korth, M. Monelli, P. Montanes Rodriguez, N. Casasayas-Barris, G. Chen, N. Crouzet, J.P. de Leon, A. Hernandez, K. Kawauchi, P. Klagyivik, N. Kusakabe, R. Luque, M. Mori, T. Nishiumi, J. Prieto-Arranz, M. Tamura, N. Watanabe, T. Gan, K.I. Collins, E.L.N. Jensen, T. Barclay, J.P. Doty, J.M. Jenkins, D.W. Latham, M. Paegert, G. Ricker, D.R. Rodriguez, S. Seager, A. Shporer, R. Vanderspek, J. Villaseñor, J.N. Winn, B. Wohler, I. Wong

Comments: Accepted 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!!!!

[5] [arXiv:2011.11284](#)

Title: "Peeking inside the Black Box: Interpreting Deep Learning Models for Exoplanet Atmospheric Retrievals"

Author: Kai Hou Yip, Quentin Changeat, Nikolaos Nikolaou, Mario Morvan, Billy Edwards, Ingo P. Waldmann, Giovanna Tinetti

Comments: 30 pages, 22 figures. submitted to ApJ

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!!!!

[6] [arxiv:2011.11279](#)

Title: "Remote determination of the shape of Jupiter's vortices from laboratory experiments"

Author: Daphné Lemasquerier, Giulio Facchini, Benjamin Favier, Michael Le Bars

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arxiv:2011.11172](#)

Title: "Application of the mixing length theory to assess the generation of melt in internally heated systems"

Author: Kenny Vilella, Shunichi Kamata

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arxiv:2011.10845](#)

Title: "Refined Telluric Absorption Correction for Low-Resolution Ground-Based Spectroscopy: Resolution and Radial Velocity Effects in the O2 A-Band for Exoplanets and K I Emission Lines"

Author: Stefan Kimeswenger, Manuel Rainer, Norbert Przybilla, Wolfgang Kausch

Comments: 11 pages, 9 figures, accepted for publication in Astronomical Journal (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!!!!

[9] [arxiv:2011.10833](#)

Title: "Tidal locking and the gravitational fold catastrophe"

Author: Andrea Ferroglia, Miguel C. N. Fiolhais

Comments: 13 pages, 5 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:2011.10626](#)

Title: "A New Window into Planet Formation and Migration: Refractory-to-Volatile Elemental Ratios in Ultra-hot Jupiters"

Author: Joshua D. Lothringer, Zafar Rustamkulov, David K. Sing, Neale P. Gibson, Jamie Wilson, Kevin C. Schlaufman

Comments: 18 pages, 8 Figures. Submitted to AAS Journals. Comments welcome

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

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:2011.10587](#)

Title: "Is TiO emission present in the ultra-hot Jupiter WASP-33b? A reassessment using the improved ExoMol Toto line list"

Author: Dilovan B. Serindag, Stevanus K. Nugroho, Paul Mollière, Ernst J. W. de Mooij, Neale P. Gibson, Ignas A. G. Snellen

Comments: 17 pages, 15 figures, Accepted for publication in A&A

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:2011.11106](#)

Title: "Multiple common envelope events from successive planetary companions"

Author: Luke Chamandy, Eric G. Blackman, Jason Nordhaus, Emily Wilson

Comments: 5 pages, 2 figures, submitted to MNRAS

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

[理論/観測/実験 etc....]

Comment!!!!

11月25日(水曜日)

[1] [arXiv:2011.12197](#)

Title: "ESPRESSO high resolution transmission spectroscopy of WASP-76b"

Author: H. M. Taberner, M. R. Zapatero Osorio, R. Allart, F. Borsa, N. Casasayas-Barris, O. Demangeon, D. Ehrenreich, J. Lillo-Box, C. Lovis,

E. Pallé, S. G. Sousa, R. Rebolo, N. C. Santos, F. Pepe, S. Cristiani, V. Adibekyan, C. Allende Prieto, Yann Alibert, S. C. C. Barros, F. Bouchy, V. Bourrier, V. D’Odorico, X. Dumusque, J. P. Faria, P. Figueira, R. Génova Santos, J. I. González Hernández, S. Hojjatpanah, G. Lo Curto, B. Lavie, C. J. A. P. Martins, J. H. C. Martins, A. Mehner, G. Micela, P. Molaro, N. J. Nunes, E. Poretti, J. V. Seidel, A. Sozzetti, A. Suárez Mascareño, S. Udry, M. Aliverti, M. Affolter, D. Alves, M. Amate, G. Avila, T. Bandy, W. Benz, A. Bianco, C. Broeg, A. Cabral, P. Conconi, J. Coelho, C. Cumani, S. Deiries, H. Dekker, B. Delabre, A. Fragoso

Comments: 20 pages, 19 figures, accepted for publication in Astronomy and Astrophysics

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

[理論/観測/実験 etc....]

照射度の高い高温の Hot Jupiter WASP-76b に対して、ESPRESSO を用いて透過分光を行なった。その結果、この惑星で初めて Li を検出し、先行研究で報告されていた Na と Fe の存在も確認した。論文中の手法を用いれば、透過スペクトルで 0.1%、約 10ppm レベルの透過光の特徴を捉えることができる。

[2] [arxiv:2011.11698](#)

Title: ”Ultra Short Period Planets in K2 III: Neighbors are Common with 12 New Multi-Planet Systems and 26 Newly Validated Planets in Campaigns 0-8, 10”

Author: Elisabeth R. Adams, Brian Jackson, Samantha Johnson, David R. Ciardi, William D. Cochran, Michael Endl, Mark E. Everett, Elise Furlan, Steve B. Howell, Prasanna Jayanthi, Phillip J. MacQueen, Rachel A. Matson, Ciera Partyka-Worley, Joshua Schlieder, Nicholas J. Scott, Sevio M. Stanton, Carl Ziegler

Comments: Submitted to PSJ

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

[理論/観測/実験 etc....]

EVEREST という速攻パイプラインを用いて、K2 データ中の超短周期惑星 ($P < 1$ day) を 74 個を同定し、その内 33 個を初検出した。短周期惑星に関しては、パイプラインが惑星半径の下限まで辿り着いていなかった事を示唆する。

[3] [arxiv:2011.11680](#)

Title: ”Bridging the Planet Radius Valley: Stellar Clustering as a Key Driver for Turning Sub-Neptunes into Super-Earths”

Author: J. M. Diederik Kruijssen, Steven N. Longmore, Mélanie Chevance

Comments: 8 pages, 3 figures, 1 table; ApJ Letters in press (accepted 2020 November 22; revised 2020 November 19; received 2020 October 22)

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....]

惑星半径の分布は、岩石惑星サイズと海王星サイズの二峰性の分布 (radius valley) をなしており、その形状の形成過程については様々なシナリオが考えられている。Gaia で恒星の位置-速度のパラメータスペースで統計をとると、フィールド星の方が radial valley 以下の population 不足がある事が統計的にわかった。より大きいスケールの惑星系環境が惑星分布に寄与していることを示唆している。

[4] [arxiv:2011.12178](#)

Title: "Gas giant-like zonal jets in the laboratory"

Author: Daphné Lemasquerier, Benjamin Favier, Michael Le Bars

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

[理論/観測/実験 etc....]

巨大ガス惑星の強烈な東西風 (帯状ジェット) の安定・構造メカニズムはあんまりよくわかっていない。実験室系で惑星内部の嵐や対流運動を再現する事で、その物理をいろいろ調べた。

[5] [arxiv:2011.12148](#)

Title: "Fast error-safe MOID computation involving hyperbolic orbits"

Author: Roman. V. Baluev

Comments: 15 pages, 5 figures, 2 tables; accepted by Astronomy & Computing

Subjects: Instrumentation and Methods for Astrophysics (astro-ph.IM); Earth and Planetary Astrophysics (astro-ph.EP); Dynamical Systems (math.DS); Numerical Analysis (math.NA)

[理論/観測/実験 etc....]

最小軌道交差距離 (MOID) を計算するアルゴリズムを拡張した。メインベルト天体の衝突予測などで使用されるものらしい。

[6] [arxiv:2011.11821](#)

Title: "A precise asteroseismic age and metallicity for HD 139614: a pre-main-sequence star with a protoplanetary disc in Upper-Centaurus Lupus"

Author: Simon J. Murphy, Meridith Joyce, Timothy R. Bedding, Timothy R. White, Mihkel Kama

Comments: Figures make use of colour. Submitted to MNRAS

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

[理論/観測/実験 etc....]

TESS の光度曲線から HD 139614 という OB 型星の脈動パターンを同定した。星震学のモデリングから質量・年齢・金属量のかなり正確な推定まで行っている (行えている、すごい)。

11 月 26 日 (木曜日)

[1] [arXiv:2011.12890](#)

Title: "Probe-insertion exhibits gravity-dependent stick-slip dynamics in experiments on a model system for regolith surfaces"

Author: Jack Featherstone, Robert Bullard, Tristan Emm, Anna Jackson, Riley Reid, Sean Shefferman, Adrienne Dove, Joshua Colwell, Jonathan E. Kollmer, Karen E. Daniels

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Soft Condensed Matter (cond-mat.soft)

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:2011.12744](#)

Title: "The lunar surface as a recorder of astrophysical processes"

Author: Ian A. Crawford, Katherine H. Joy, Jan H. Pasckert, Harald Hiesinger

Comments: Published in Philosophical Transactions of the Royal Society, A379: 20190562 (2020)

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:2011.12502](#)

Title: "New insights into temperature-dependent ice properties and their effect on ice shell convection for icy ocean worlds"

Author: Evan Carnahan, Natalie S. Wolfenbarger, Jacob S. Jordan, Marc A. Hesse

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:2011.12484](#)

Title: "Numerical study of coorbital thermal torques on cold or hot satellites"

Author: Raúl O. Chametla, Frédéric S. Masset

Comments: 12 pages, 9 figures. Accepted for publication in MNRAS

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:2011.12319](#)

Title: "Chemically tracing the water snowline in protoplanetary disks with HCO⁺"

Author: M. Leemker, M. L. R. van 't Hoff, L. Trapman, M. L. van Gelder, M. R. Hogerheijde, D. Ruíz-Rodríguez, E. F. van Dishoeck

Comments: Accepted for publication in Astronomy and Astrophysics. 13 pages, 11 figures + appendices

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:2011.12311](#)

Title: "TRAP: A temporal systematics model for improved direct detection of exoplanets at small angular separations"

Author: M. Samland, J. Bouwman, D. W. Hogg, W. Brandner, T. Henning, M. Janson

Comments: This paper has 21 pages of which 17 are the main body and 4 pages are appendix. 16 main figures and 4 figures in appendix

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:2011.12300](#)

Title: "Stratified and vertically-shearing streaming instabilities in protoplanetary disks"

Author: Min-Kai Lin

Comments: Accepted by ApJ; project source codes are hosted at this [https URL](#); for a lay summary, see this [https URL](#)

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:2011.12299](#)

Title: "Rapid destruction of planetary debris around WDs through wind erosion"

Author: Mor Rozner, Dimitri Veras, Hagai B. Perets

Comments: Comments are welcome

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:2011.12297](#)

Title:

”The effect of stellar multiplicity on protoplanetary discs. A NIR survey of the Lupus star forming region”

Author:Alice Zurlo, Lucas A. Cieza, Megan Ansdell, Valentin Christiaens, Sebastián Pérez, Josh Lovell, Dino Mesa, Jonathan P. Williams, Camilo Gonzalez-Ruilova, Rosamaria Carraro, Dary Ruíz-Rodríguez, Mark Wyatt

Comments: 11 pages, 15 figures, accepted for publication in 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!!!!

[10] [arXiv:2011.12803](#)

Title: ”Unusual chemistry of the C-H-N-O system under pressure and implications for giant planets”

Author:Anastasia S. Naumova, Sergey V. Lepeshkin, Pavel V. Bushlanov, Artem R. Oganov

Subjects: Materials Science (cond-mat.mtrl-sci); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:2011.12298](#)

Title: ”Grain growth for astrophysics with Discontinuous Galerkin schemes”

Author:M. Lombart, G. Laibe

Comments: 17 pages, 22 figures, Accepted for publication in MNRAS

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)

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:2011.12294](#)

Title: ”Uniform Forward-Modeling Analysis of Ultracool Dwarfs. I. Methodology and Benchmarking”

Author:Zhoujian Zhang, Michael C. Liu, Mark S. Marley, Michael R. Line, William M. J. Best

Comments: 46 pages including 11 figures and 6 tables. Submitted to ApJ. Comments are welcome

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!!!!

Nature

ない

Science

ない