

2019年 3月 第4週 新着論文サーベイ

3月 18日 (月曜日)

[1] [arXiv:1903.06622](#)

Title: "Three Hot-Jupiters on the upper edge of the mass-radius distribution: WASP-177, WASP-181 and WASP-183"

Author: Oliver D. Turner, D.R. Anderson, K. Barkaoui, F. Bouchy, Z. Benkhaldoun, D.J.A. Brown, A. Burdanov, A. Collier Cameron, E. Ducrot, M. Gillon, C. Hellier, E. Jehin, M. Lendl, P.F.L. Maxted, L.D. Nielsen, F. Pepe, D. Pollacco, F.J. Pozuelos, D. Queloz, D. Segransan, B. Smalley, A.H.M.J. Triaud, S. Udry, R.G. West

Comments: 11 pages, 9 figures, 5 tables

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

[理論/観測/実験 etc....]

惑星質量-半径分布の上端付近に位置する (半径が大きい) hot-Jupiter を 3つ発見した。

[2] [arXiv:1903.06598](#)

Title: "Characterizing Extra-solar Oort Clouds with Submillimeter-wave Observations"

Author: Eric Baxter, Cullen Blake, Mark Devlin, Bhuvnesh Jain, John Orłowski-Scherer

Comments: 7 pages, 1 figure

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

[理論/観測/実験 etc....]

サブミリ波でオールトの雲からの熱放射を観測する事ができるか。次世代に期待。

[3] [arXiv:1903.06587](#)

Title: "The trail of water and the delivery of volatiles to habitable planets"

Author: Klaus M. Pontoppidan, Andrea Banzatti, Edwin Bergin, Geoffrey A. Blake, Sean Brittain, Maryvonne Gerin, Paul Goldsmith, Quentin Kral, David Leisawitz, Dariusz Lis, Melissa McClure, Stefanie Milam, Gary Melnick, Joan Najita, Karin Öberg, Matt Richter, Colette Salyk, Martina Wiedner, Ke Zhang

Comments: Science white paper submitted to the Astro2020 Decadal Survey

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

[理論/観測/実験 etc....]

次世代の高解像度分光観測で惑星形成環境を調べたい。Astro2020 Decadal Survey の white paper。

[4] [arxiv:1903.06572](#)

Title: "Meteoroid Structure and Fragmentation"

Author: Margaret D. Campbell-Brown

Comments: 30 pages, 6 figures

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

[理論/観測/実験 etc....]

隕石の構造や破壊仮定について、その物理や観測の現状を少しまとめた。

[5] [arxiv:1903.06550](#)

Title: "Searching for Technosignatures: Implications of Detection and Non-Detection"

Author: Jacob Haqq-Misra, Anamaria Berea, Amedeo Balbi, Claudio Grimaldi

Comments: Science white paper submitted to the Astro2020 Decadal Survey. arXiv admin note: substantial text overlap with arXiv:1801.00052

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

[理論/観測/実験 etc....]

銀河系内および近傍の宇宙で Technosignatures を探索する戦略について。Astro2020 Decadal Survey の white paper。

[6] [arxiv:1903.06537](#)

Title: "Dust traps in the protoplanetary disc MWC 758: two vortices produced by two giant planets?"

Author: Clément Baruteau, Marcelo Barraza, Sebastián Pérez, Simon Casassus, Ruobing Dong, Wladimir Lyra, Sebastián Marino, Valentin Christiaens, Zhaohuan Zhu, Andrés Carmona, Florian Debras, Felipe Alarcon

Comments: 18 pages, 8 figures, accepted for publication in MNRAS

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

[理論/観測/実験 etc....]

MWC 758 には ALMA と VLA の観測により、2つのダストトラップ(リングと三日月構造)がみられることがわかっている。3D のダスト輻射輸送計算と 2D の gas+dust 流体計算を行った結果、それらの構造は 2つの数木星質量惑星の存在によって説明できることがわかった。

[7] [arxiv:1903.06373](#)

Title: "Collisional Elongation: Possible Origin of Extremely Elongated Shape of

1I/‘Oumuamua”

Author: Keisuke Sugiura, Hiroshi Kobayashi, Shu-ichiro Inutsuka

Comments: 21 pages, 9 figures, accepted to Icarus

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

[理論/観測/実験 etc....]

Oumuamua の引き伸ばされたような形状は、微惑星の衝突により生まれたものかもしれない。どのような衝突が伸びた形状を生み出すのか SPH で調べた。

[8] [arxiv:1903.06321](https://arxiv.org/abs/1903.06321)

Title: ”Solar system Deep Time-Surveys of atmospheres, surfaces, and rings”

Author: Michael H. Wong, Richard Cartwright, Nancy Chanover, Kunio Sayanagi, Thomas Greathouse, Matthew Tiscareno, Rohini Giles, Glenn Orton, David Trilling, James Sinclair, Noemi Pinilla-Alonso, Michael Lucas, Eric Gaidos, Bryan Holler, Stephanie Milam, Angel Otarola, Amy Simon, Katherine de Kleer, Conor Nixon, Patrick Fry, Máté Ádámkóvics, Stacia H. Luszcz-Cook, Amanda Hendrix

Comments: 10 pages, 4 figures: submitted for Astro2020 White Paper

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

[理論/観測/実験 etc....]

太陽系の天体の大気、表面、リングなどを長期間に渡って観測することでその細かな構造の変化を捉えたい。Astro2020 White Paper。

[9] [arxiv:1903.06300](https://arxiv.org/abs/1903.06300)

Title: ”1I/‘Oumuamua and the Problem of Survival of Oort Cloud Comets Near the Sun”

Author: Zdenek Sekanina

Comments: 19 pages, 6 figures, 10 tables

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

[理論/観測/実験 etc....]

Oumuamua がオールとの雲起源だった場合の問題点について。

[10] [arxiv:1903.06299](https://arxiv.org/abs/1903.06299)

Title: ”The Demographics and Atmospheres of Giant Planets with the ELTs”

Author: Brendan Bowler, Steph Sallum, Alan Boss, Timothy Brandt, Zack Briesemeister, Marta Bryan, Laird Close, Justin Crepp, Thayne Currie, Jonathan Fortney, Julien Girard, Rebecca Jensen-Clem, Mihkel Kama, Adam Kraus, Quinn Konopacky, Michael Liu, Mark Marley, Christian

Marois, Dimitri Mawet, Tiffany Meshkat, Michael Meyer, Caroline Morley, Eric Nielsen, Andrew Skemer, Jason Wang, Ya-Lin Wu

Comments: White paper for the Astro2020 decadal survey

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

[理論/観測/実験 etc....]

ELTs で巨大惑星の大気を調べたい。White paper for the Astro2020 decadal survey。

[11] [arXiv:1903.06283](#)

Title: "Multiverse Predictions for Habitability: Fraction of Planets that Develop Life"

Author: McCullen Sandora

Comments: 37 pages, 6 figures

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

[理論/観測/実験 etc....]

生命が発展できる惑星の条件や割合に着目した多元宇宙論の可能性について。

[12] [arXiv:1903.06217](#)

Title: "Monitoring of the D Doublet of Neutral Sodium during Transits of Two "Evaporating" Planets"

Author: Eric Gaidos, Teruyuki Hirano, Megan Ansdell

Comments: Accepted to MNRAS, 24 February 2019

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

[理論/観測/実験 etc....]

Kepler-1520b および K2-22b がトランジットしている際の主星の高解像度可視スペクトルを得た。中性ナトリウムの D 線の吸収がどちらにも見られた。

[13] [arXiv:1903.06216](#)

Title: "Aquaplanet Models on Eccentric Orbits: Effects of Rotation Rate on Observables"

Author: Arthur D. Adams, William R. Boos, Eric T. Wolf

Comments: 26 pages, 15 figures, 3 tables. Accepted for publication in the Astronomical Journal

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

[理論/観測/実験 etc....]

水惑星の気候に対してその自転と軌道離心率がどのような効果を与え、惑星からの放射に影響するか調べた。

[14] [arXiv:1903.06190](#)

Title: "Gas vs dust sizes of protoplanetary disks: effects of dust evolution"

Author:L. Trapman, S. Facchini, M.R. Hogerheijde, E.F. van Dishoeck, S. Bruderer

Comments: 18 pages, 27 figures, accepted in A&A

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....]

原始惑星系円盤中でのダスト進化を考慮した熱化学計算を行い、光学的厚みや円盤のパラメータがガスとダストのサイズに与える影響を調べた。

[15] [arxiv:1903.06184](#)

Title: "Three direct imaging epochs could constrain the orbit of Earth 2.0 inside the habitable zone"

Author: Claire Marie Guimond, Nicolas B. Cowan

Comments: 12 pages, 9 figures, accepted for publication in AJ

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

[理論/観測/実験 etc....]

Space-based の系外惑星直接撮像ミッション (HabEx, LUVOIR) に向けて、ある擬似的な観測 (シミュレーション?) を行った。

[16] [arxiv:1903.06703](#)

Title: "Brown Dwarfs and Directly Imaged Exoplanets in Young Associations"

Author: Jacqueline K. Faherty, Katelyn Allers, Daniella Bardalez Gagliuffi, Adam J. Burgasser, Jonathan Gagné, John Gizis, J. Davy Kirkpatrick, Adric Riedel, Adam Schneider, Johanna Vos

Comments: Astro 2020 White paper. 8 pages, 4 figures, 1 table

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

[理論/観測/実験 etc....]

若い星団中の独立な褐色矮星を次世代望遠鏡で調べたい。Astro 2020 White paper。

[17] [arxiv:1903.06699](#)

Title: "Substellar Multiplicity Throughout the Ages"

Author: Daniella Bardalez Gagliuffi, Kimberly Ward-Duong, Jacqueline Faherty, Alex Greenbaum, Federico Marocco, Adam Burgasser, Matthew Bate, Trent Dupuy, Christopher Gelino, Johannes Sahlmann, Frantz Marti-nache, Michael Meyer, Quinn Konopacky, Denise Stephens

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

[理論/観測/実験 etc....]

非常に冷たい矮星の多重連星系の存在分布や物理量を調べたい。Astro 2020 white paper。

[18] [arXiv:1903.06691](#)

Title: "Astro2020 White Paper: The L/T Transition"

Author: Johanna M. Vos, Katelyn Allers, Daniel Apai, Beth Biller, Adam Burgasser, Jacqueline Faherty, Jonathan Gagné, Christiane Helling, Caroline Morley, Jacqueline Radigan, Adam Showman, Xianyu Tan, Pascal Tremblin

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

[理論/観測/実験 etc....]

褐色矮星の T 型から L 型への遷移中は大気中の様々な物理過程を知るのに良い時期なので、次世代に観測したい。
Astro 2020 white paper。

[19] [arXiv:1903.06634](#)

Title: "Increasing the Discovery Space in Astrophysics - A Collation of Six Submitted White Papers"

Author: G. Fabbiano, M. Elvis, A. Accomazzi, G. B. Berriman, N. Brickhouse, S. Bose, D. Carrera, I. Chilingarian, F. Civano, B. Czerny, R. D'Abrusco, B. Diemer, J. Drake, R. Emami Meibody, J. R. Farah, G. G. Fazio, E. Feigelson, F. Fornasini, Jay Gallagher, J. Grindlay, L. Hernquist, D. J. James, M. Karovska, V. Kashyap, D.-W. Kim, G. M. Lacy, J. Lazio, E. Lusso, W. P. Maksym, R. Martinez Galarza, J. Mazzeella, M. Ntampaka, G. Risaliti, D. Sanders, N. Scoville, I. Shapiro, A. Siemiginowska, A. Smth, S. Smith, A. Szentgyorgyi, S. Tacchella, A. Thakar, V. Tolls, S. Vrtilik, B. Wilkes, D. Wilner, S. P. Willner, S. J. Wolk, J.-H. Zhao

Subjects: Astrophysics of Galaxies (astro-ph.GA); 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....]

Astro 2020 Decadal Survey にサブミットされた 6 つの white paper に対する返答。

[20] [arXiv:1903.06623](#)

Title: "A method to deconvolve stellar rotational velocities III. The probability distribution function via Maximum Likelihood utilizing Finite Distribution Mixtures"

Author: Rafael Orellana, Pedro Escarate, Michel Cure, Alejandra Christen, Rodrigo Carvajal, Juan Carlos Agüero

Subjects:

Solar and Stellar Astrophysics (astro-ph.SR); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA); Data Analysis, Statistics and Probability (physics.data-an)

[理論/観測/実験 etc....]

恒星の自転速度分布を正確に求める手法の研究において、新たなアプローチを提唱した。

[21] [arxiv:1903.06242](#)

Title: "The Early Evolution of Stars and Exoplanet Systems: Exploring and Exploiting Nearby, Young Stars (an Astro2020 Science White Paper)"

Author: Joel H. Kastner, Katelyn Allers, Brendan Bowler, Thayne Currie, Jeremy Drake, Trent Dupuy, Jackie Faherty, Jonathan Gagné, Michael Liu, Eric Mamajek, Dimitri Mawet, Evgenya Shkolnik, Inseok Song, Russel White, Ben Zuckerman

Comments: 9 pages, 1 figure; Astro2020 Science White Paper

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

[理論/観測/実験 etc....]

若い近傍の運動星団中の若い星の進化過程や系外惑星系についての調査は進んでいないので、次世代に調べたい。

Astro2020 White Paper.

3月19日(火曜日)

[1] [arxiv:1903.07556](#)

Title: "New Frontiers for Terrestrial-sized to Neptune-sized Exoplanets In the Era of Extremely Large Telescopes"

Author: Ji Wang, Michael R. Meyer, Alan Boss, Laird Close, Thayne Currie, Diana Dragomir, Jonathan Fortney, Eric Gaidos, Yasuhiro Hasegawa, Irina Kitiashvili, Quinn Konopacky, Chien-Hsiu Lee, Nikole K. Lewis, Michael Liu, Roxana Lupu, Dimitri Mawet, Carl Melis, Mercedes Lopez-Morales, Caroline V. Morley, Chris Packham, Eliad Peretz, Andy Skemer, Mel Ulmer

Comments: Astro2020 Science White Paper

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxiv:1903.07517](#)

Title: "Consequences of Tidal Dissipation in a Putative Venusian Ocean"

Author: J.A.M. Green, M.J. Way, R. Barnes

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:1903.07436](#)

Title: "What factors affect the duration and outgassing of the terrestrial magma ocean?"

Author: Athanasia Nikolaou, Nisha Katyal, Nicola Tosi, Mareike Godolt, John Lee Grenfell, Heike Rauer

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:1903.07298](#)

Title: "The habitability of stagnant-lid Earths around dwarf stars"

Author: Mareike Godolt, Nicola Tosi, Barbara Stracke, J. Lee Grenfell, Thomas Ruedas, Tilman Spohn, Heike Rauer

Comments: 15 pages, accepted by A&A, abstract shortened

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:1903.07186](#)

Title: "Long-Period Giant Companions to Three Compact, Multiplanet Systems"

Author: Sean M. Mills, Andrew W. Howard, Lauren M. Weiss, Jason H. Steffen, Howard Isaacson, Benjamin J. Fulton, Erik A. Petigura, Molly R. Kosiarek, Lea A. Hirsch, John H. Boisvert

Comments: Accepted to AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:1903.07152](#)

Title: "Characterizing Transiting Exoplanets with JWST Guaranteed Time and ERS Observations"

Author: Thomas Greene, Jacob Bean, Thomas Beatty, Jeroen Bouwman, Jonathan Fortney, Yasuhiro Hasegawa, Thomas Henning, David Lafre-

niere, Pierre-Olivier Lagage, George Rieke, Thomas Roellig, Everett
Schlawin, Kevin Stevenson

Comments: Submitted Astro2020 Decadal Survey Science White Paper

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:1903.06910](#)

Title: "On the Dynamics of Comets in Extrasolar Planetary Systems"

Author: Rudolf Dvorak, Birgit Loibnegger, Manfred Cuntz

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:1903.06853](#)

Title: "Reconstructing Extreme Space Weather from Planet Hosting Stars"

Author: V. S. Airapetian, V. Adibekyan, M. Ansdell, D. Alexander, T. Bastian, S. Boro Saikia, A. S. Brun, O. Cohen, M. Cuntz, W. Danchi, J. Davenport, J. DeNolfo, R. DeVore, C. F. Dong, J. J. Drake, K. France, F. Fraschetti, K. Herbst, K. Garcia-Sage, M. Gillon, A. Gloer, J. L. Grenfell, G. Gronoff, N. Gopalswamy, M. Guedel, H. Hartnett, H. Harutyunyan, N. R. Hinkel, A. G. Jensen, M. Jin, C. Johnstone, P. Kalas, S. R. Kane, C. Kay, I.N. Kitiashvili, O. Kochukhov, D. Kondrashov, J. Lazio, J. Leake, G. Li, J. Linsky, T. Lueftinger, B. Lynch, W. Lyra, A. M. Mandell, K. E. Mandt, H. Maehara, M. S. Miesch, A. M. Mickaelian, S. Mouchou, Y. Notsu, L. Ofman, L. D. Oman, R. A. Osten, R. Oran, R. Petre, R. M. Ramirez, G. Rau, S. Redfield, V. Réville, S. Rugheimer, M. Scheucher, J. E. Schlieder, K. Shibata

Comments: White Paper submitted to the Astronomy and Astrophysics Decadal Survey (Astro2020), 8 pages, 1 figure

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arXiv:1903.06794](#)

Title: "Self-luminous and irradiated exoplanetary atmospheres explored with HELIOS"

Author: Matej Malik, Daniel Kitzmann, João M. Mendonça, Simon L. Grimm, Gabriel-Dominique Marleau, Esther F. Linder, Shang-Min Tsai, Kevin Heng

Comments: 33 pages, 18 figures, accepted for publication in AJ

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:1903.06793](#)

Title: "Stellar Occultation by Comet 67P/Churyumov-Gerasimenko Observed with Rosetta's Alice Far-Ultraviolet Spectrograph"

Author: B. A. Keeney, S. A. Stern, P. D. Feldman, M. F. A'Hearn, J.-L. Bertaux, L. M. Feaga, M. M. Knight, R. A. Medina, J. Noonan, J. Wm. Parker, J. P. Pineau, R. N. Schindhelm, A. J. Steffl, M. Versteeg, R. J. Vervack, Jr., H. A. Weaver

Comments: Accepted for publication in the Astronomical Journal; 9 pages, 7 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:1903.06746](#)

Title: "Effect of Different Angular Momentum Transport mechanisms on the Distribution of Water in Protoplanetary Disks"

Author: Anusha Kalyaan, Steven J. Desch

Comments: Accepted to ApJ (Mar 7, 2019)

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:1903.07611](#)

Title: "Total Power Map to Visibilities (TP2VIS): Joint Deconvolution of ALMA 12m, 7m, and Total Power Array Data"

Author: Jin Koda, Peter Teuben, Tsuyoshi Sawada, Adele Plunkett, Ed Fomalont

Comments: Accepted to PASP. Software distribution: this [https URL](#)

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!!!!

[13] [arXiv:1903.07205](#)

Title: "Observational constraint on the radius and oblateness of the lunar core-mantle boundary"

Author: Vishnu Viswanathan, Nicolas Rambaux, Agnes Fienga, Jacques Laskar, Mickael Gastineau

Comments: Submitted for publication in Geophysical Research Letters

Subjects: Geophysics (physics.geo-ph); Earth and Planetary Astrophysics (astro-ph.EP); General Relativity and Quantum Cosmology (gr-qc)

[理論/観測/実験 etc....]

Comment!!!!

[14] [arXiv:1903.07204](#)

Title: "Destruction of dimethyl ether and methyl formate by collisions with He⁺"

Author: Daniela Ascenzi, Andrea Cernuto, Nadia Balucani, Paolo Tosi, Cecilia Ceccarelli, Luca Matteo Martini, Fernando Pirani

Comments: accepted for publication in Astronomy and Astrophysics (manuscript no. AA/2018/34585), 10 pages, 3 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[15] [arXiv:1903.07059](#)

Title: "Nonminimally coupled curvature-matter gravity models and Solar System constraints"

Author: Riccardo March, Orfeu Bertolami, Jorge Páramos, Simone Dell'Agnello

Comments: 6 pages; based on talk delivered by one of us (R. M.) at the 15th Marcel Grossmann Meeting, Rome, July 2018

Subjects: General Relativity and Quantum Cosmology (gr-qc); Earth and Planetary Astrophysics (astro-ph.EP)

[理論/観測/実験 etc....]

Comment!!!!

3月20日(水曜日)

[1] [arXiv:1903.08090](#)

Title: "Searching for Exosatellites Orbiting L and T Dwarfs: Connecting Planet Formation to Moon Formation and Finding New Temperate Worlds"

Author: Philip S. Muirhead, Julie N. Skinner, Jacqueline Radigan, Amaury Tri-
aud, Christopher Theissen, Daniella Bardalez Gagliuffi, Patrick Tamburo,
Adam Burgasser, Jacqueline Faherty, Denise Stephens

Comments: Science white paper submitted to the Astro 2020 Decadal Survey on Astronomy and Astrophysics

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

[White paper / 系外衛星]

L dwarf または T dwarf 周りのトランジット衛星は、JWST のターゲットの 1 つである。これを観測することのモチベーションについて書いた white paper。

[2] [arxiv:1903.08019](#)

Title: "A Taxonomic Study of Asteroid Families from KMTNet-SAAO Multi-band
Photometry"

Author: N. Erasmus, A. McNeill, M. Mommert, D. E. Trilling, A. A. Sickafoose,
K. Paterson

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

[観測/小惑星]

2000 個のメインベルト小惑星をマルチバンド測光観測し、V-R と V-I の色で分類した。Themis, Koronis, Hygiea, Massalia, Eunomia の族は、それぞれの族が同じような色の小惑星で構成されていたのに対し、Vesta, Flora, Nysa-Polana, Eos の族は、それぞれの族に異なる色の小惑星がよく混じっていた。また、433 個の小惑星に対し自転周期を算出したが、族ごとの相関は見られなかった。

[3] [arxiv:1903.08017](#)

Title: "The L 98-59 System: Three Transiting, Terrestrial-Sized Planets Orbiting
a Nearby M-dwarf"

Author: Veselin B. Kostov, Joshua E. Schlieder, Thomas Barclay, Elisa V. Quintana, Knicole D. Colon, Jonathan Brande, Karen A. Collins, Samuel Hadden, Stephen R. Kane, Laura Kreidberg, Ethan Kruse, Christopher Lam, Elisabeth Matthews, Benjamin T. Montet, Francisco J. Pozuelos, Keivan G. Stassun, Jennifer G. Winters, George Ricker, Roland Vanderpek, David Latham, Sara Seager, Joshua Winn, Jon M. Jenkins, Dennis Afanasev, James J. D. Armstrong, Patricia Boyd, Geert Barentsen, Khalid Barkaoui, Natalie E. Batalha, Daniel Bayliss, Artem Burdanov, Luca Caciapuoti, Andrew Carson, David Charbonneau, Kevin I. Collins, Dennis M. Conti, Giovanni Covone, Mark Clampin, Laetitia Delrez, Courtney Dressing, Elsa Ducrot, Zahra Essack, Mark E. Everett, Daniel Foreman-Mackey, Tianjun Gan, Emily Gilbert, Michael Gillon

Comments: 42 pages, 22 figures, submitted to AAS, comments welcome

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

[観測/L 98-59]

TESS によって、M3 型星 L 98-59 (TOI-175, TIC 307210830) を公転するトランジット惑星が 3 つ見つかった。3 つの惑星の半径は $0.7 - 1.3R_{\oplus}$ で、公転周期は $2.25 - 7.45$ 日。外側の 2 つは 2:1 共鳴の位置にある。

[4] [arxiv:1903.08002](#)

Title: "WASP-180Ab: Doppler tomography of an hot Jupiter orbiting the primary star in a visual binary"

Author: L.Y. Temple, C. Hellier, D.R. Anderson, K. Barkaoui, F. Bouchy, D.J.A. Brown, A. Burdanov, A. Collier Cameron, L. Delrez, E. Ducrot, D. Evans, M. Gillon, E. Jehin, M. Lendl, P.F.L. Maxted, J. McCormac, C. Murray, L. D. Nielsen, F. Pepe, D. Pollacco, D. Queloz, D. Ségransan, B. Smalley, S. Thompson, A.H.M.J. Triaud, O.D. Turner, S. Udry, R.G. West, B. Zouhair

Comments: 8 pages, 6 figures, submitted to MNRAS

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

[観測/ WASP-180Ab]

連星の primary である F7 型星を公転するホットジュピター WASP-180Ab をドップラー法で発見した。質量は $0.8M_J$ 、半径は $1.29R_J$ で、軌道は逆行している。

[5] [arxiv:1903.07694](#)

Title: "HD 213885b: A transiting 1-day-period super-Earth with an Earth-like composition around a bright ($V = 7.9$) star unveiled by TESS"

Author: Néstor Espinoza, Rafael Brahm, Thomas Henning, Andrés Jordán, Caroline Dorn, Felipe Rojas, Paula Sarkis, Diana Kossakowski, Matías Díaz, James S. Jenkins, Claudia Aguilera-Gomez, Jon M. Jenkins, Joseph D. Twicken, Karen A. Collins, Jack Lissauer, David J. Armstrong, Vardan Adibekyan, David Barrado, Susana C. C. Barros, Matthew Battley, Daniel Bayliss, François Bouchy, Edward Bryant, Benjamin F. Cooke, Olivier D. S. Demangeon, Xavier Dumusque, Pedro Figueira, Helen Giles, Jorge Lillo-Box, Christophe Lovis, Louise D. Nielsen, Francesco Pepe, Don Pollaco, Nuno C. Santos, Sergio G. Sousa, Stéphane Udry, Peter J. Wheatley, Oliver Turner, Maxime Marmier, Damien Ségransan, George Ricker, David Latham, Sara Seager, Joshua N. Winn, John F. Kielkopf, Rhodes Hart

Comments: Submitted to MNRAS — comments welcome

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

[観測/HD 213885]

TESS によって、 $V=7.9$ という明るい星 HD 213885 を周期 1.008 日で公転するスーパーアース HD 213885b が発見された。FEROS, HARPS, CORALIE によって RV 観測されており、質量は $8.83M_{\oplus}$ 、半径は $1.745R_{\oplus}$ という高密度である。また、RV によって HD 213885c が発見されていて、公転周期は 4.78 日、質量は $19.95M_{\oplus}$ である。

[6] [arXiv:1903.07691](#)

Title: "Exploring the composition of icy bodies at the fringes of the Solar System with next generation space telescopes"

Author: Richard J. Cartwright, Bryan Holler, Susan Benecchi, Roser Juanola-Parramon, Giada Arney, Aki Roberge, Heidi Hammel

Comments: White paper for the Astro2020 decadal survey

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

[White paper]

太陽系の土星以遠の天体の表面にある揮発性の氷や有機物を観測することは重要。これまで可視光や $0.7 - 2.5 \mu\text{m}$ の近赤外での観測はよくされてきたが、 $2.5 - 5.0 \mu\text{m}$ の近赤外や紫外線での観測はあまりなされていないので、やりたい。

[7] [arXiv:1903.07661](#)

Title: "Rethinking CO Antibiosignatures in the Search for Life Beyond the Solar System"

Author: Edward W. Schwieterman, Christopher T. Reinhard, Stephanie L. Olson, Kazumi Ozaki, Chester E. Harman, Peng K. Hong, Timothy W. Lyons

Comments: 10 pages, 5 figures, 2 tables. Published Open Access in ApJ

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

[理論/惑星大気]

本当は生命がいるのに生命がないと思わせるような指標は antibiosignature とよばれ、CO がその候補の 1 つである。地球では CO は生命によって奪われたが、バイオマスの燃焼や光酸化や光化学反応によって CO は生成される。今回、1D の生態圏・大気計算によって、光合成が行われている生態系において CO が 100ppmv の濃度で維持できることがわかった。

[8] [arXiv:1903.07620](#)

Title: "Hint of curvature in the orbital motion of the exoplanet 51 Eridani b using 3 years of VLT/SPHERE monitoring"

Author: A.-L. Maire, L. Rodet, F. Cantalloube, R. Galicher, W. Brandner, S. Messina, C. Lazzoni, D. Mesa, D. Melnick, J. Carson, M. Samland, B. A. Biller, A. Boccaletti, Z. Wahhaj, H. Beust, M. Bonnefoy, G. Chauvin, S. Desidera, M. Langlois, T. Henning, M. Janson, J. Olofsson, D. Rouan, F. M nard, A.-M. Lagrange, R. Gratton, A. Vigan, M. R. Meyer, A. Cheetham, J.-L. Beuzit, K. Dohlen, H. Avenhaus, M. Bonavita, R. Claudi,

M. Cudel, S. Daemgen, V. D'Orazi, C. Fontanive, J. Hagelberg, H. Le Coroller, C. Perrot, E. Rickman, T. Schmidt, E. Sissa, S. Udry, A. Zurlo, L. Abe, A. Origné, F. Rigal, G. Rousset, A. Roux, L. Weber

Comments: Accepted for publication in A&A. 15 pages, 12 figures, 6 tables

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

[観測/51 Eridani]

51 Eridani は 2000AU の間隔をもつ連星系で、primary は 13AU の位置に惑星を持っていて、デブリ円盤もある。今回、この惑星を VLT/SPHERE で 3 年間観測し、軌道要素の値を求めた。

[9] [arxiv:1903.08026](#)

Title: "**Stellar encounters with giant molecular clouds**"

Author:Giorgi Kokaia, Melvyn B. Davies

Comments: Accepted to MNRAS

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

[理論/銀河のハビタブルゾーン]

銀河系内で惑星系が巨大分子雲を通過する頻度を計算することによって、(分子雲は星形成領域であるから) 惑星系が超新星爆発に遭う頻度を計算した。この頻度の銀河中心からの距離の依存性を調べて、銀河系のハビタブルゾーンの位置を計算した。

[10] [arxiv:1903.07716](#)

Title: "**Engaging Citizen Scientists to Keep Transit Times Fresh and Ensure the Efficient Use of Transiting Exoplanet Characterization Missions**"

Author:Robert T. Zellem, Anya Biferno, David R. Ciardi, Mary Dussault, Laura Peticolas, Martin Fowler, Kyle A. Pearson, Wilfred Gee, Rachel Zimmerman-Brachman, Denise Smith, Lynn Cominsky, Gael M. Roudier, Brandon Lawton, Robert Baer, Diana Dragomir, Nemanja Jovanovic, Marc Kuchner, Frank Sienkiewicz, Josh Walawender

Comments:White Paper submitted to Astro2020 Science Call, 5 pages, 3 figures, community comments and involvement are welcome!

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

[White paper]

アマチュア天文学者のコミュニティがトランジットを観測し続けることの意義について主張している White paper。

3 月 21 日 (木曜日)

[1] [arxiv:1903.08446](#)

Title: "**Stellar Surface Magneto-Convection as a Source of Astrophysical Noise III.**"

Sun-as-a-star Simulations and Optimal Noise Diagnostics”

Author:H. M. Cegla, C. A. Watson, S. Shelyag, M. Mathioudakis, S. Moutari

Comments:18 pages + 15 pages references/appendix, 24 figures, 6 tables, re-submitted to ApJ after referee comments

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:1903.08419](#)

Title: ”A systematic ranging technique for follow-ups of NEOs detected with the Flyeye telescope”

Author:Michael Frühauf, Marco Micheli, Toni Santana-Ros, Rüdiger Jehn, Detlef Koschny, Olga Ramirez Torralba

Comments:In Proc. 1st NEO and Debris Detection Conference. Darmstadt, Germany: ESA Space Safety Programme Office (2019)

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:1903.08413](#)

Title: ”Simulation of Sky Surveys with the Flyeye Telescope”

Author:Olga Ramirez Torralba, Rüdiger Jehn, Detlef Koschny, Michael Frühauf, Laura S. Jehn, Alexander Praus

Comments:In Proc. 1st NEO and Debris Detection Conference (Darmstadt, Germany, 22-24 January 2019)

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:1903.08320](#)

Title: ”First Results from the rapid-response spectrophotometric characterization of Near-Earth Objects”

Author:Samuel Navarro-Meza, Michael Mommert, David Trilling, Nathaniel Butler, Mauricio Reyes-Ruiz, Barbara Pichardo, Tim Axelrod, Robert Jedicke, Nicholas Moskovitz

Comments:31 pages, 4 tables, 10 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arXiv:1903.08283](#)

Title: "Protoplanetary Disk Masses from Radiative Transfer Modeling: A Case Study in Taurus"

Author: Nicholas P. Ballering, Josh A. Eisner

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

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:1903.08219](#)

Title: "The Scientific Context of WFIRST Microlensing in the 2020s"

Author: Jennifer Yee, Rachel Akeson, Jay Anderson, Etienne Bachelet, Charles Beichman, Andrea Bellini, David P. Bennett, Aparna Bhattacharya, Valerio Bozza, Geoffrey Bryden, Sebastiano Calchi Novati, B. Scott Gaudi, Andrew Gould, Calen B. Henderson, Savannah R. Jacklin, Samson A. Johnson, Naoki Koshimoto, Shude Mao, David M. Nataf, Matthew Penny, Radoslaw Poleski, Clément Ranc, Kailash Sahu, Yossi Shvartzvald, Keivan G. Stassun, Rachel Street

Comments: Science White Paper submitted to the Astro2020 Decadal Survey, 8 pages, 2 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arXiv:1903.08187](#)

Title: "Wide-Orbit Exoplanet Demographics"

Author: David P. Bennett, Rachel Akeson, Yann Alibert, Jay Anderson, Etienne Bachelet, Jean-Phillipe Beaulieu, Andrea Bellini, Aparna Bhattacharya, Alan Boss, Valerio Bozza, Stephen Bryson, Derek Buzasi, Sebastiano Calchi Novati, Jessie Christiansen, Shawn D. Domagal-goldman, Michael Endl, Benjamin J. Fulton, Calen B. Henderson, B. Scott Gaudi, Samson A. Johnson, Naoki Koshimoto, Michael Meyer, Gijs D. Mulders, Susan Mullally, Ruth Murray-Clay, David Nataf, Eric Nielsen, Henry Ngo, Ilaria Pascucci, Matthew Penny, Peter Plavchan, Radek Poleski, Clement Ranc, Sean N. Raymond, Leslie Rogers, Johannes Sahlmann, Kailash C. Sahu,

Joshua Schlieder, Yossi Shvartzvald, Alessandro Sozzetti, Rachel Street,
Takahiro Sumi, Daisuke Suzuki, Neil Zimmerman

Comments: Astro2020 Science White paper

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arxive:1903.08186](#)

Title: "Spectroscopic Transit Search: a self-calibrating method for detecting planets around bright stars"

Author: Lennart van Sluijs, Ernst de Mooij, Matthew Kenworthy, Maggie Celeste, Matthew J. Hooton, Eric E. Mamajek, Brigitta Sipőcz, Ignas. A. G. Snellen, Andrew R. Ridden-Harper, Paul A. Wilson

Comments: Accepted for publication in A&A, 8 pages, 8 figures. The Github repository can be found at this [https URL](#)

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] [arxive:1903.08185](#)

Title: "Masses and Distances of Planetary Microlens Systems with High Angular Resolution Imaging"

Author: Aparna Bhattacharya, Rachel Akeson, Jay Anderson, Etienne Bachelet, Jean-Phillipe Beaulieu, Andrea Bellini, David P. Bennett, Alan Boss, Valerio Bozza, Geoffrey Bryden, Arnaud Cassan, David R. Ciardi, Martin Dominik, Akihiko Fukui, B. Scott Gaudi, Calen B. Henderson, Savannah Jacklin, Samson A. Johnson, Naoki Koshimoto, Shude Mao, Dimitri Mawet, Henry Ngo, Matthew T. Penny, Radoslaw Poleski, Clément Ranc, Sarah Dodgson-Robinson, Leslie A. Rogers, Kailash C. Sahu, Sara Seager, R.A. Street, Daisuke Suzuki, Judit Szulagyi, Yiannis Tsapras, Andrzej Udalski, Philip Yock, Neil Zimmerman

Comments: 8 pages, 2 figures, Astro2020 decadal submission

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:1903.08180](#)

Title: "Measurement of the Free-Floating Planet Mass Function with Simultaneous Euclid and WFIRST Microlensing Parallax Observations"

Author: Matthew T. Penny, Etienne Bachelet, Samson Johnson, Jean-Phillipe Beaulieu, Eamonn Kerins, Jason Rhodes, Rachel Akeson, David Bennett, Charles Beichman, Aparna Bhattacharya, Valerio Bozza, Sebastiano Calchi Novati, B. Scott Gaudi, Calen B. Hendederson, Shude Mao, Radek Poleski, Clement Ranc, Kailash C. Sahu, Yossi Shvartzvald, Rachel Street

Comments: Astro2020 White Paper

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

[理論/観測/実験 etc....]

Comment!!!!

[11] [arxiv:1903.08503](#)

Title: "Line Profiles of the Calcium I Resonance Line in Cool Metal-polluted White Dwarfs"

Author: S. Blouin, N. F. Allard, T. Leininger, F. X. Gadéa, P. Dufour

Comments: 6 pages, 9 figures, 1 table. Accepted for publication in The Astrophysical Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arxiv:1903.08381](#)

Title: "The Promise of Data Science for the Technosignatures Field"

Author: Anamaria Berea, Steve Croft, Daniel Angerhausen

Comments: Science white paper submitted in response to the the U.S. National Academies of Science, Engineering, and Medicine's call for community input to the Astro2020 Decadal Survey; 7 pages, 1 figure

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

[理論/観測/実験 etc....]

Comment!!!!

[13] [arxiv:1903.08348](#)

Title: "Global Stability Properties of the Climate: Melancholia States, Invariant Measures, and Phase Transitions"

Author: Valerio Lucarini, Tamas Bodai

Comments: 37 Pages, 10 Figures

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

Statistical Mechanics (cond-mat.stat-mech); Chaotic Dynamics (nlin.CD)

[理論/観測/実験 etc....]

Comment!!!!

[14] [arxiv:1903.08188](#)

Title: ”[Astro2020 Science White Paper: Stellar Physics and Galactic Archeology using Asteroseismology in the 2020’s](#)”

Author: Daniel Huber, Sarbani Basu, Paul Beck, Timothy R. Bedding, Derek Buzasi, Matteo Cantiello, William J. Chaplin, Jessie L. Christiansen, Kattia Cunha, Ricky Egeland, Jim Fuller, Rafael A. Garcia, Douglas R. Gies, Joyce Guzik, Saskia Hekker, JJ Hermes, Jason Jackiewicz, Jennifer Johnson, Steve Kawaler, Travis Metcalfe, Benoit Mosser, Melissa Ness, Marc Pinsonneault, Anthony L. Piro, Victor Silva Aguirre, David Soderblom, Keivan Stassun, Jamie Tayar, Theo ten Brummelaar, Rachael Roettenbacher, Jennifer Sobeck, Regner Trampedach, Gerard van Belle, Jennifer van Saders, Dennis Stello

Comments: 11 pages, 4 figures. White paper submitted to the Astro2020 Decadal Survey

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!!!!

3 月 22 日 (金曜日)

[1] [arxiv:1903.09110](#)

Title: ”[Mapping out the time-evolution of exoplanet processes](#)”

Author: Jessie L. Christiansen, Charles Beichman, David R. Ciardi, Daniel Huber, Mark S. Marley

Comments: Astro2020 white paper

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:1903.09017](#)

Title: ”[Surface evolution of the Anhur region on comet 67P from high-resolution OSIRIS images](#)”

Author:S. Fornasier, C. Feller, P.H. Hasselmann, M.A. Barucci, J. Sunshine, J.-B. Vincent, X. Shi, H. Sierks, G.Naletto, P. L. Lamy, R. Rodrigo, D. Koschny, B. Davidsson, J.-L. Bertaux, I. Bertini, D. Bodewits, G. Cremonese, V. Da Deppo, S. Debei, M. De Cecco, J. Deller, S. Ferrari, M. Fulle, P. J. Gutierrez, C.Güttler, W.-H. Ip, L. Jorda, H.U. Keller, M. L. Lara, M. Lazzarin, J.J. Lopez Moreno, A. Lucchetti, F. Marzari, S. Mottola, M. Pajola, I. Toth, C. Tubiana

Comments: 19 pages, 16 figures; accepted for publication in Astronomy and Astrophysics for the Rosetta 2 special number

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arxiv:1903.08972](https://arxiv.org/abs/1903.08972)

Title: "The CO₂-broadened H₂O continuum in the 100-1500 cm⁻¹ region. Measurements, predictions and empirical model"

Author:Ha Tran, Martin Turbet, Simon Hanoufa, Xavier Landsheere, Pascale Chelin, Qiancheng Ma, Jean-Michel Hartmann

Comments: Accepted for publication in the Journal of Quantitative Spectroscopy 11 pages and 3 figures

Subjects: Earth and Planetary Astrophysics (astro-ph.EP); Atmospheric and Oceanic Physics (physics.ao-ph); Atomic and Molecular Clusters (physics.atm-clus); Chemical Physics (physics.chem-ph)

[理論/観測/実験 etc....]

Comment!!!!

[4] [arxiv:1903.08825](https://arxiv.org/abs/1903.08825)

Title: "Onset of giant planet migration before 4480 million years ago"

Author:Stephen J. Mojzsis, Ramon Brasser, Nigel M. Kelly, Oleg Abramov, Stephanie C. Werner

Comments: Main text: 46564 characters with spaces/7549 words Tables: 3 Figures:7 References: 115

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxiv:1903.08777](https://arxiv.org/abs/1903.08777)

Title: "The Disk Gas Mass and the Far-IR Revolution"

Author:Edwin A. Bergin, Klaus M. Pontoppidan, Charles M. Bradford, L. Ilse-dore Cleeves, Neal J. Evans, Maryvonne Gerin, Paul F. Goldsmith, Quentin

Kral, Gary J. Melnick, Melissa McClure, Karin Oberg, Thomas L. Roellig,
Edward Wright, Richard Teague, Jonathan P. Williams, Ke Zhang

Comments: Science white paper submitted to the Astro2020 Decadal Survey

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arxive:1903.08769](#)

Title: "An analytical model of radial dust trapping in protoplanetary disks"

Author: Anibal Sierra, Susana Lizano, Enrique Macías, Carlos Carrasco-González,
Mayra Osorio, Mario Flock

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arxive:1903.08753](#)

Title: "Astro2020 Science White Paper: Triggered High-Priority Observations of
Dynamic Solar System Phenomena"

Author: Nancy Chanover, Michael H. Wong, Thomas Greathouse, David Trilling,
Al Conrad, Imke de Pater, Eric Gaidos, Richard Cartwright, Michael Lu-
cas, Karen Meech, Glenn Orton, Noemi Pinilla-Alonso, Kunio Sayanagi,
Megan E. Schwamb, Matthew Tiscareno, Christian Veillet, Bryan Holler,
Katherine de Kleer, Heidi Hammel, Amanda Hendrix, Angel Otarola,
Conor Nixon, Susan Benecchi, Amy Simon, Kathleen Mandt, Anne Ver-
biscer, Rohini Giles, Kurt Retherford, Patrick Fry, James F. Bell, Stefanie
Milam, Andy Rivkin, Statia Luszcz-Cook

Comments: Astro2020 white paper

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arxive:1903.08733](#)

Title: "OGLE-2018-BLG-0022: A Nearby M-dwarf Binary"

Author: R.A. Street, E. Bachelet, Y. Tsapras, M.P.G. Hundertmark, V. Bozza,
M. Dominik, D.M. Bramich, A. Cassan, K. Horne, S. Mao, A. Saha, J.
Wambsganss, Weicheng Zang, U.G. Jorgensen, P. Longa-Pena, N. Peix-
inho, S. Sajadian, M.J. Burgdorf, J. Campbell-White, S. Dib, D.F. Evans,

Y.I. Fujii, T.C. Hinse, E. Khalouei, S. Lowry, S. Rahvar, M. Rabus, J. Skottfelt, C. Snodgrass, J. Southworth, J. Tregloan-Reed

Comments: Accepted by AJ. 23 pages, 8 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[9] [arxiv:1903.09043](#)

Title: "A high performance and portable all-Mach regime flow solver code with well-balanced gravity. Application to compressible convection"

Author: T. Padioleau, P. Tremblin, E. Audit, P. Kestener, S. Kokh

Comments: Accepted in APJ

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arxiv:1903.08986](#)

Title: "Auxiliary Science with the WFIRST Microlensing Survey"

Author: B. Scott Gaudi, Rachel Akeson, Jay Anderson, Etienne Bachelet, David P. Bennett, Aparna Bhattacharya, Valerio Bozza, Sebastiano Calchi Novati, Calen B. Henderson, Samson A. Johnson, Jeffrey Kruk, Jessica R. Lu, Shude Mao, Benjamin T. Montet, David M. Nataf, Matthew T. Penny, Radoslaw Poleski, Clément Ranc, Kailash Sahu, Yossi Shvartzvald, David N. Spergel, Daisuke Suzuki, Keivan G. Stassun, Rachel A. Street

Comments: 9 pages, 3 figures, submitted to the Astro2020 Science White Paper call. This white paper draws heavily from Chapter 2.5 of Spergel et al. 2015 (arXiv:1503.03757), which was written by the lead author of this white paper

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

[理論/観測/実験 etc....]

Comment!!!!

Nature

ない

Science
ない