

2018年 9月 第1週 新着論文サーベイ

9月3日(月曜日)

[1] [arXiv:1808.10865](#)

Title: "A Survey of Water Production in 61 Comets from SOHO/SWAN Observations of Hydrogen Lyman-alpha: Twenty-One Years 1996-2016"

Author: M.R. Combi, T.T. Mäkinen, J.-L. Bertaux, E. Quémerais, S. Ferron

Comments: 43 pages, 9 figures, 6 tables

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

[観測/彗星]

太陽コロナ・太陽風等を観測する衛星 SOHO/SWAN の観測 (1996-2016 年) で、61 個の彗星の水生成率を見積もった。水素ライマン α 輝線を使ったらしい。

[2] [arXiv:1808.10790](#)

Title: "Molecule mapping of HR8799b using OSIRIS on Keck: Strong detection of water and carbon monoxide, but no methane"

Author: D. J. M. Petit dit de la Roche, H. J. Hoeijmakers, I. A. G. Snellen

Comments: 5 pages, 5 figures and 2 tables, accepted by A&A

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

[観測/系外惑星大気]

Keck/OSIRIS で観測されたガス惑星 HR8799b の直接分光アーカイブデータ (H, K bands) を molecule mapping の手法で再解析。CO と H₂O は検出できたが、CH₄ は発見できず。

[3] [arXiv:1808.10707](#)

Title: "Metallicity effect and planet mass function in pebble-based planet formation models"

Author: Natacha Brügger, Yann Alibert, Sareh Ataiee, Willy Benz

Comments: 13 pages, 22 figures

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

[理論/pebble accretion 入り惑星形成]

Bitsch et al. 2015a,b の disk model と pebble model を使い、population synthesis の手法で最終的な惑星分布を計算。金属量依存性なども調べた。

巨大ガス惑星が大量にでき、海王星型惑星が少ないという、観測に近い傾向が捉えられた。

[4] [arXiv:1808.10510](#)

Title:

”Scaling Relations Associated with Millimeter Continuum Sizes in Protoplanetary Disks”

Author: Sean M. Andrews, Marie Terrell, Anjali Tripathi, Megan Ansdell, Jonathan P. Williams, David J. Wilner

Comments: Astrophysical Journal, in press

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

[観測/原始惑星系円盤]

SMA と ALMA のダスト連続波の観測から、原始惑星系円盤のサイズー Luminosity (Mass accretion rate) 関係を算出。105 天体も観測。

[5] [arxiv:1808.10682](#)

Title: ”Constraining Gas-Phase Carbon, Oxygen, and Nitrogen in the IM Lup Protoplanetary Disk”

Author: L. Ilesedore Cleeves, Karin I. Oberg, David J. Wilner, Jane Huang, Ryan A. Loomis, Sean M. Andrews, V. V. Guzman

Comments: 16 pages, 8 figures, accepted for publication in ApJ

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

[観測/円盤 C,N,O 分布]

IM Lup の C₂H 輝線を ALMA 観測。C/O 比が 0.8 程度と算出。その上で HCN, H¹³CN 輝線の ALMA アーカイブデータを使って、O の多くがダスト表面に trap されていること、N の多くが N₂ などの形で存在していることを示した。

9 月 5 日 (水曜日)

[1] [arxiv:1809.01082](#)

Title: ”Shadows and asymmetries in the T Tauri disk HD 143006: Evidence for a misaligned inner disk”

Author: M. Benisty, A. Juhasz, S. Facchini, P. Pinilla, J. de Boer, L. M. Perez, M. Keppler, G. Muro-Arena, M. Villenave, S. Andrews, C. Dominik, C. P. Dullemond, A. Gallenne, A. Garufi, C. Ginski, A. Isella

Comments: Accepted for publication in A&A

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arxiv:1809.01048](#)

Title: ”HATS-60b - HATS-69b: Ten Transiting Planets From HATSouth”

Author: J. D. Hartman, G. A. Bakos, D. Bayliss, J. Bento, W. Bhatti, R. Brahm,

Z. Csubry, N. Espinoza, Th. Henning, A. Jordán, L. Mancini, K. Penev, M. Rabus, P. Sarkis, V. Suc, M. de Val-Borro, G. Zhou, B. Addison, P. Arriagada, R. P. Butler, J. Crane, S. Durkan, S. Shectman, T. G. Tan, I. Thompson, C. G. Tinney, D. J. Wright, J. Lázár, I. Papp, P. Sári

Comments: Submitted to AAS Journals, 41 pages, 12 figures, 19 Tables

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:1809.01027](#)

Title: "Activity induced variation in spin-orbit angles as derived from Rossiter-McLaughlin measurements"

Author: M. Oshagh, A. H. M. J. Triaud, A. Burdanov, P. Figueira, A. Reiners, N. C. Santos, J. Faria, G. Boue, R. F. Diaz, S. Dreizler, S. Boldt, L. Delrez, E. Ducrot, M. Gillon, A. Guzman Mesa, E. Jehin, S. Khalafinejad, S. Kohl, L. Serrano, S. Udry

Comments: 18 pages, 7 figures, 6 tables, accepted for publication in 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!!!!

[4] [arXiv:1809.01001](#)

Title: "High-Contrast study of the candidate planets and protoplanetary disk around HD 100546"

Author: E. Sissa, R. Gratton, A. Garufi, E. Rigliaco, A. Zurlo, D. Mesa, M. Langlois, J. de Boer, S. Desidera, C. Ginski, A.-M. Lagrange, A.-L. Maire, A. Vigan, M. Dima, J. Antichi, A. Baruffolo, A. Bazzon, M. Benisty, J.-L. Beuzit, B. Biller, A. Boccaletti, M. Bonavita, M. Bonnefoy, W. Brandner, P. Bruno, E. Buenzli, E. Cascone, G. Chauvin, A. Cheetham, R.U. Claudi, M. Cudel, V. De Caprio, C. Dominik, D. Fantinel, G. Farisato, M. Feldt, C. Fontanive, R. Galicher, E. Giro, J. Hagelberg, S. Incorvaia, M. Janson, M. Kasper, M. Keppler, T. Kopytova, E. Lagadec, J. Lannier, C. Lazzoni, H. LeCoroller, L. Lessio, R. Ligi, F. Marzari, F. Menard, M.R. Meyer, D. Mouillet, S. Peretti, C. Perrot, P. J. Potiron, D. Rouan, B. Salasnich, G. Salter, M. Samland, T. Schmidt, S. Scuderi, F. Wildi

Comments: Accepted by A&A on 30/08/2018

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

[理論/観測/実験 etc....]

Comment!!!!

[5] [arxive:1809.00700](#)

Title: "New Jupiter Satellites and Moon-Moon Collisions"

Author: Scott Sheppard, Gareth Williams, David Tholen, Chadwick Trujillo, Marina Brozovic, Audrey Thirouin, Maxime Devogele, Dora Fohring, Robert Jacobson, Nicholas Moskovitz

Comments: Published Research Notes AAS

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arxive:1809.00689](#)

Title: "Proving Heliocentrism and Measuring the Astronomical Unit in a Laboratory Astronomy Class via the Aberration of Starlight"

Author: Jason T. Wright

Comments: this http URL

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

[理論/観測/実験 etc....]

Comment!!!!

[7] [arxive:1809.00678](#)

Title: "NGTS-4b: A sub-Neptune Transiting in the Desert"

Author: Richard G. West, Edward Gillen, Daniel Bayliss, Matthew R. Burleigh, Laetitia Delrez, Maximilian N. Günther, Simon T. Hodgkin, James A. G. Jackman, James S. Jenkins, George King, James McCormac, Louise D. Nielsen, Liam Raynard, Alexis M. S. Smith, Maritza Soto, Oliver Turner, Peter J. Wheatley, Yaseen Almleaky, David J. Armstrong, Claudia Belardi, François Bouchy, Joshua T. Briegal, Artem Burdanov, Juan Cabrera, Sarah L. Casewell, Alexander Chaushev, Bruno Chazelas, Paul Chote, Benjamin F. Cooke, Szilard Csizmadia, Elsa Ducrot, Philipp Eigmüller, Anders Erikson, Emma Foxell, Boris T. Gänsicke

Comments: Submitted to MNRAS

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

[理論/観測/実験 etc....]

Comment!!!!

[8] [arXiv:1809.00645](#)

Title: "Is there really a debris disc around ζ^2 Reticuli ?"

Author: V. Faramaz, G. Bryden, K. R. Stapelfeldt, M. Booth, A. Bayo, H. Beust, S. Casassus, J. Cuadra, A. Hales, A. M. Hughes, J. Olofsson, K. Y. L. Su, D. J. Wilner

Comments: 6 pages, 2 figures, 2 tables

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:1809.00572](#)

Title: "A Hexagon in Saturn's Northern Stratosphere Surrounding the Emerging Summertime Polar Vortex"

Author: L.N. Fletcher, G.S. Orton, J.A. Sinclair, S. Guerlet, P.L. Read, A. Antunano, R.K. Achterberg, F.M. Flasar, P.G.J. Irwin, G.L. Bjoraker, J. Hurley, B.E. Hesman, M. Segura, N. Gorius, A. Mamoutkine, S.B. Calcutt

Comments: 51 pages, 12 figures, published in Nature Communications

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

[理論/観測/実験 etc....]

Comment!!!!

[10] [arXiv:1809.00492](#)

Title: "On quasi-satellite periodic motion in asteroid and planetary dynamics"

Author: G. Voyatzis, K. I. Antoniadou

Comments: Accepted for publication in Celestial Mechanics and Dynamical Astronomy

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

[理論/観測/実験 etc....]

Comment!!!!

[11] [arXiv:1809.00472](#)

Title: "Orbital evolution of Saturn's mid-sized moons and the tidal heating of Enceladus"

Author: Ayano Nakajima, Shigeru Ida, Jun Kimura, Ramon Brasser

Comments: 37 pages, 7 figures, accepted for publication in Icarus

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

[理論/観測/実験 etc....]

Comment!!!!

[12] [arXiv:1809.00314](#)

Title: "Stellar Obliquities & Planetary Alignments (SOPA) I. Spin-Orbit measurements of Three Transiting Hot Jupiters: WASP-72b, WASP-100b, & WASP-109b"

Author: B. C. Addison, S. Wang, M. C. Johnson, C. G. Tinney, D. J. Wright, D. Bayliss

Comments: 10 pages, 10 figures, 6 tables. Has been accepted for publication in The Astronomical Journal

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

[理論/観測/実験 etc....]

Comment!!!!

[13] [arXiv:1809.00007](#)

Title: "Kepler-730b is probably a hot Jupiter with a small companion"

Author: Wei Zhu, Fei Dai, Kento Masuda

Comments: 3 pages, 1 figure, accepted to RNAAS

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

[理論/観測/実験 etc....]

Comment!!!!

[14] [arXiv:1809.00002](#)

Title: "A Universal Nightside Temperature on Hot Jupiters due to Nocturnal Clouds"

Author: Dylan Keating, Nicolas B. Cowan

Comments: 29 pages, 35 figures. Submitted August 13th, 2018

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

[理論/観測/実験 etc....]

Comment!!!!

[15] [arXiv:1809.01045](#)

Title: "Women Scientists Who Made Nuclear Astrophysics"

Author: C. V. Hampton, M. Lugaro, P. Papakonstantinou, P. G. Isar, B. Nordström, N. Özkan, M. Aliotta, A. Čiprijanović, S. Curtis, M. Di Criscienzo, J. den Hartogh, A. S. Font, A. Kankainen, C. Kobayashi, C. Lederer-Woods, E. Niemczura, T. Rauscher, A. Spyrou, S. Van Eck, M. Yavahchova, W. Chantereau, S. E. de Mink, E. Kaiser, F.-K. Thielemann, C.

Travaglio, A. Venkatesan, R. Collet

Comments: 5 pages; to appear in Springer Proceedings in Physics (Proc. of Intl. Conf. "Nuclei in the Cosmos XV", LNGS Assergi, Italy, June 2018)

Subjects: History and Philosophy of Physics (physics.hist-ph); Earth and Planetary Astrophysics (astro-ph.EP); Astrophysics of Galaxies (astro-ph.GA); High Energy Astrophysical Phenomena (astro-ph.HE); Solar and Stellar Astrophysics (astro-ph.SR); Nuclear Experiment (nucl-ex); Nuclear Theory (nucl-th)

[理論/観測/実験 etc....]

Comment!!!!

[16] [arxiv:1809.00902](#)

Title: "Electron intensity measurements by the Cluster/RAPID/IES instrument in Earths radiation belts and ring current"

Author: Artem Smirnov, Elena Kronberg, Flanck Latallerie, Patrick Daly, Nikita Aseev, Yuri Shprits, Adam Kellerman, Satoshi Kasahara, Drew Turner, Matthew Taylor, Shoichiro Yokota, Kunihiro Keika, Tomo Hori

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

[理論/観測/実験 etc....]

Comment!!!!

[17] [arxiv:1809.00353](#)

Title: "The ice composition in the protoplanetary disk V883 Ori revealed by its stellar outburst"

Author: Jeong-Eun Lee, Seokho Lee, Giseon Baek, Yuri Aikawa, Lucas Cieza, Sung-Yong Yoon, Gregory Herczeg, Doug Johnstone, Simon Cassasus

Comments: 36 pages, 9 figures, 3 tables

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!!!!

9月6日(木曜日)

[1] [arxiv:1809.01648](#)

Title: "Radial and vertical dust transport inhibit refractory carbon depletion in protoplanetary disks"

Author: L. Klarmann, C. W. Ormel, C. Dominik

Comments: 8 pages, 3 figures, 2 tables, accepted for publication at A&A

Subjects:

Earth and Planetary Astrophysics (astro-ph.EP)

[理論]

地球の物質は星間ダストと比べて炭素が著しく欠乏しており、原始惑星系円盤上層でダスト粒子の炭素の酸化、光分解が起こるためと考えられている。円盤中の個体物質の鉛直、水平方向それぞれの医龍拡散方程式を解いて炭素除去の効率を評価した。

[2] [arXiv:1809.01629](#)

Title: "Magma oceans as a critical stage in the tectonic development of rocky planets"

Author: Laura Schaefer, Linda T. Elkins-Tanton

Comments: 25 pages, 2 figures, 1 table; in press at Phil. Trans. Roy. Soc. A

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

[理論]

地球、月、火星について、現在のマントルや内部構造を再現するマグマオーシャンのモデルを調べ、マグマオーシャン中で精製したマントルの酸化状態を計算した。マグマオーシャンの結晶化によって、積層したマントルが転覆することでプレートテクトニクスが遅れたり、妨げられたりするらしい。

[3] [arXiv:1809.01418](#)

Title: "Abrupt climate transition of icy worlds from snowball to moist or runaway greenhouse"

Author: Jun Yang, Feng Ding, Ramses M. Ramirez, W. R. Peltier, Yongyun Hu, Yonggang Liu

Comments: 31 pages, 4 figures, 2 supplementary tables, and 9 supplementary figures

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

[理論]

スノーボール状態から湿潤/暴走温室状態への移行が可能であるかを調べるため、温室効果ガスが少なく炭化ケイ素サイクルも弱い、気候がハビタブルでない氷天体について、全球気候モデルシミュレーションを行った。スノーボールを脱するのに必要な恒星フラックスはめちゃくちゃ大きく、ハビタブルにはならず暴走温室へ突入してしまうらしい。

[4] [arXiv:1809.01397](#)

Title: "Differences in water vapor radiative transfer among 1D models can significantly affect the inner edge of the habitable zone"

Author: Jun Yang, Jeremy Leconte, Eric T. Wolf, Colin Goldblatt, Nicole Feldl, Timothy Merlis, Yuwei Wang, Daniel D.B. Koll, Feng Ding, Francois Forget, Dorian S. Abbot

Comments: 25 pages, 1 table, and 10 figures

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

[理論]

7つの1次元輻射輸送計算コード (SMART, LBLRTM, CAM3, CAM4_{Wolf}, LMDG, SBDART, AM2) で計算した

ハビタブルゾーンの内側境界を比較した。雲なし大気の輻射輸送による暴走温室境界の不定性は、SMART と LBLRTM では現在の太陽定数の 3%、CAM3, CAM4_{Wolf}, LMDG, SBDART, AM2 では 10% だった。

[5] [arxiv:1809.01376](#)

Title: "Idealized Wind-driven Ocean Circulations On Exoplanets"

Author: Weiwen Ji, Ru Chen, Jun Yang

Comments: 9 pages, 1 table and 4 figures

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

[理論]

水深の浅い海洋を持つ惑星で、自転速度、風速、海の渦粘性、地形が風による海洋循環に及ぼす影響を 1 層海洋循環シミュレーションで調べた。閉じた海ではパラメータを色々変えても海流のパターンは変化せず、流れの強さにしか影響がなかったが、水路っぽい地形 (地球の南洋のような) ではパラメータによって帯状の海流パターンが生じた。

[6] [arxiv:1809.01310](#)

Title: "Modeling Circumstellar Disc Fragmentation and Episodic Protostellar Accretion with Smoothed Particle Hydrodynamics in Cell"

Author: Olga P. Stoyanovskaya, Nikolay V. Snytnikov, Valeriy N. Snytnikov

Comments: 17 pages, 13 figures

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

[理論/計算手法]

重力的に不安定な原始惑星系円盤の質量降着と分裂を SPH 法でモデル化した。

[7] [arxiv:1809.01295](#)

Title: "Analysis of Methods for Computing the Trajectories of Dust Particles in a Gas-Dust Circumstellar Disk"

Author: Olga P. Stoyanovskaya, Valeriy N. Snytnikov, Eduard I. Vorobyov

Comments: 21 pages, 8 figures

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

[計算手法]

ガストダストからなる星周円盤の中で個体物質の軌跡を計算する手法を初めて考案した。

[8] [arxiv:1809.01288](#)

Title: "KMT-2017-BLG-0165Lb: A Super-Neptune mass planet Orbiting a Sun-like Host Star"

Author: Youn Kil Jung, Andrew Gould, Weicheng Zang, Kyu-Ha Hwang, Yoon-Hyun Ryu, Cheongho Han, Jennifer C. Yee, Michael D. Albrow, Sun-Ju Chung, In-Gu Shin, Yossi Shvartzvald, Wei Zhu, Sang-Mok Cha, Dong-

Jin Kim, Hyoun-Woo Kim, Seung-Lee Kim, Chung-Uk Lee, Dong-Joo Lee, Yongseok Lee, Byeong-Gon Park, Richard W. Pogge, Matthew T. Penny, Shude Mao, Pascal Fouqué, Tianshu Wang

Comments: 25 pages, 2 tables, 9 figures, submitted to AAS

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

[観測]

質量 $0.76_{-0.27}^{+0.34}M_{\odot}$ の太陽型星の周りに質量 $34_{-12}^{+15}M_{\oplus}$ のスーパーネプチューン KMT-2017-BLG-0165Lb を発見した。中心星からの射影距離は $3.45_{-0.95}^{+0.98}$ AU で、スノーラインよりも外側だった。

[9] [arxiv:1809.01228](#)

Title: "Radial velocities from the N2K Project: 6 new cold gas giant planets orbiting HD 55696, HD 98736, HD 148164, HD 203473, and HD 211810"

Author: Kristo Ment, Debra A. Fischer, Gaspar Bakos, Andrew W. Howard, Howard Isaacson

Comments: Accepted by the Astronomical Journal. 75 pages, 49 figures

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

[観測]

金属リッチな恒星周りのガス惑星を観測して、惑星の数(多分)と金属量の関係調べる N2K というプロジェクトがある。Keck 望遠鏡での 2004-2017 の間の観測から新たに 6 つのガス惑星を検出した。

[10] [arxiv:1809.01189](#)

Title: "A Search for Refraction in Kepler Photometry of Gas Giants"

Author: Holly Sheets, Laurent Jacob, Nicolas B. Cowan, Drake Deming

Comments: 2 pages, 1 figure, accepted for publication in RNAAS

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

[観測]

惑星のトランジットの際、惑星の侵入と脱出の時に惑星大気で屈折した光によって光度が上がる可能性がある。Kepler の測光データから 45 のガス惑星で屈折の痕跡がないか探した。

[11] [arxiv:1809.01157](#)

Title: "Effects of non-Kozai mutual inclinations on two-planet system stability through all phases of stellar evolution"

Author: Dimitri Veras, Nikolaos Georgakarakos, Boris T. Gänsicke, Ian Dobbs-Dixon

Comments: Accepted for publication in MNRAS

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

[理論]

恒星進化全体を追った複数惑星系のシミュレーションを行った先行研究では、惑星の軌道は coplanar と仮定していた。非古在インクリネーションがある 2 惑星系の安定性を F, A, B 型星周りで調べてこの仮定の妥当性を評価した。平均運

動共鳴にはまっていなければ、coplanar の仮定は傾斜角が大きい場合の安定周期と critical な距離をよく近似していることがわかった。

[12] [arXiv:1809.01156](#)

Title: "Detecting isotopologues in exoplanet atmospheres using ground-based high-dispersion spectroscopy"

Author: P. Mollière, I. A. G. Snellen

Comments: 21 pages, 12 figures, submitted to A & A, comments are welcome

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

[理論/観測]

系外惑星大気のスเปクトルから分子の同位体化合物が検出可能か、可能ならそれに適した波長帯がどこかを調べ、地上観測に必要な技術、精度二つについての議論。

[13] [arXiv:1809.01150](#)

Title: "Continuous reorientation of synchronous terrestrial planets controlled by mantle convection"

Author: Jérémy Leconte

Comments: Published in Nature Geoscience. Accepted version of the manuscript before editing by the publisher

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

[理論]

系外岩石惑星の多くは自転が公転と同期して、そのために昼面と夜面が地表に対して固定されていると考えられている。しかし、真極移動 (True Polar Wander; TPW) という惑星の自転角運動量の向きを変えずに惑星の向きを変える効果が働くことで昼面と夜面の固定は起こらないという論文。

[14] [arXiv:1809.01148](#)

Title: "Compositional Diversity Among Primitive Asteroids"

Author: Humberto Campins, Julia de Leon, Javier Licandro, Amanda Hendrix, Juan A. Sanchez, Victor Ali-Lagoa

Comments: 31 pages, 11 figures, chapter 5 in Primitive Meteorites and Asteroids, Physical, Chemical, and Spectroscopic Observations Paving the Way to Exploration

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

[レビュー]

Primitive Meteorites and Asteroids, Physical, Chemical, and Spectroscopic Observations Paving the Way to Exploration という本の一部。小惑星のスเปクトルと、そこからわかる組成や物理特性についてのレビュー。

[15] [arXiv:1809.01548](#)

Title: "Measuring precise radial velocities on individual spectral lines. I. Validation of the method and application to mitigate stellar activity"

Author: Xavier Dumusque

Comments: 14 pages (plus 8 pages of Appendix), 17 figures, 1 table, Accepted for publication in A&A

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

[観測]

RV 観測で地球の双子を探す際、中心星の活動の寄与が邪魔になる。そこで、すべての観測データからマスタースペクトルを作り、スペクトル線とマスターとのズレから視線速度を求める方法を新しく構築した。

9月7日(金曜日)

[1] [arXiv:1809.02046](#)

Title: "(121514) 1999 UJ7: A primitive, slow-rotating Martian Trojan"

Author: G. Borisov, A. A. Christou, F. Colas, S. Bagnulo, A. Cellino, A. Dell'Oro

Comments: 8 pages, 5 figures

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

[理論/観測/実験 etc....]

Comment!!!!

[2] [arXiv:1809.02036](#)

Title: "Modeling the albedo of Earth-like magma ocean planets with H₂O-CO₂ atmospheres"

Author: William Pluriel, Emmanuel Marcq, Martin Turbet

Comments: 16 pages, 10 figures, 5 tables. Accepted for publication in the Journal Icarus the 27 August 2018

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

[理論/観測/実験 etc....]

Comment!!!!

[3] [arXiv:1809.01968](#)

Title: "EPIC 211964830: A transiting multi-planet system in the Praesepe open cluster"

Author: John H. Livingston, Fei Dai, Teruyuki Hirano, Davide Gandolfi, Alessandro A. Trani, Grzegorz Nowak, William D. Cochran, Michael Endl, Simon Albrecht, Oscar Barragan, Juan Cabrera, Szilard Csizmadia, Jerome P. de Leon, Hans Deeg, Philipp Eigmüller, Anders Erikson, Malcolm Fridlund, Akihiko Fukui, Sascha Grziwa, Eike W. Guenther, Artie P. Hatzes, Judith Korth, Norio Narita, David Nespral, Enric Palle, Martin Pätzold, Carina M. Persson, Jorge Prieto-Arranz, Heike Rauer, Motohide Tamura,

Vincent Van Eylen, Joshua N. Winn

Comments: 11 pages, 10 figures, 2 tables, submitted to MNRAS

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

[理論/観測/実験 etc....]

Comment!!!!

[4] [arXiv:1809.01925](#)

Title: "Chemical Signatures of the FU Ori Outbursts"

Author: Tamara Molyarova, Vitaly Akimkin, Dmitry Semenov, Péter Ábrahám,
Thomas Henning, Ágnes Kóspál, Eduard Vorobyov, Dmitri Wiebe

Comments: accepted for publication in 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!!!!

[5] [arXiv:1809.01789](#)

Title: "Exoplanets in the Antarctic sky. II. 116 Transiting Exoplanet Candidates
found by AST3-II (CHESPA) within the Southern CVZ of TESS"

Author: Hui Zhang, Zhouyi Yu, Ensi Liang, Ming Yang, Michael C. B. Ashley,
Xiangqun Cui, Fujia Du, Jianning Fu, Xuefei Gong, Bozhong Gu, Yi Hu,
Peng Jiang, Huigen Liu, Jon Lawrence, Qiang Liu, Xiaoyan Li, Zhengyang
Li, Bin Ma, Jeremy Mould, Zhaohui Shang, Nicholas B. Suntzeff, Charling
Tao, Qiguo Tian, C. G. Tinney, Syed A. Uddin, Lifan Wang, Songhu
Wang, Xiaofeng Wang, Peng Wei, Duncan Wright, Xuefeng Wu, Robert
A. Wittenmyer, Lingzhe Xu, Shi-hai Yang, Ce Yu, Xiangyan Yuan, Jessica
Zheng, Hongyan Zhou, Ji-lin Zhou, Zhenxi Zhu

Comments: 49 pages, 23 figures, 3 tables

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

[理論/観測/実験 etc....]

Comment!!!!

[6] [arXiv:1809.01730](#)

Title: "Measuring the De Sitter precession with a new Earth's satellite to the
 $\simeq 10^{-5}$ level: a proposal"

Author: Lorenzo Iorio

Comments: LaTeX2e, 25 pages, 1 table, 5 figures

Subjects: General Relativity and Quantum Cosmology (gr-qc); Earth and Planetary Astrophysics (astro-ph.EP);
Space Physics (physics.space-ph)
[理論/観測/実験 etc....]
Comment!!!!

[7] [arXiv:1809.01689](#)

Title: "EPIC 203868608: A low-mass quadruple star system in the Upper Scorpius
OB association"

Author: Ji Wang, Trevor J. David, Lynne Hillenbrand, Dimitri Mawet, Simon
Albrecht, Zibo Liu

Comments: 14 pages, 11 figures, 3 tables, ApJ accepted

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:1809.00062](#)

Title: "A Novel Entry, Descent and Landing Architecture for Mars Landers"

Author: Malaya Kumar Biswal.M, Ramesh Naidu.A

Comments: Pondicherry University Submission 2018, Theoretical Proposal for Robotic and Human Class Mars
Landers, 15 pages, 14 figures, 3 tables

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

[理論/観測/実験 etc....]
Comment!!!!
