1. CV

I. EMPLOYMENT

- Apr. 2019 Aug. 2019: Post-doc. Researcher at the University of Geneva (UniGE)
 The Swiss National Science Foundation, SNSF
- Sep. 2019 Aug. 2020: Post-doc. Researcher at UniGE
 The Swiss Government Excellence Scholarship for a postdoc
- Sep. 2020 Mar. 2021: Post-doc. Researcher at UniGE (SNSF)
- Apr. 2022 Jun. 2023: Post-doc. Researcher at UniGE (JSPS Overseas Research Fellow)
- maternity leave
- Dec. 2022 Mar. 2023: Post-doc. Researcher at UniGE (JSPS Overseas Research Fellow)
- Apr. 2023 Mar. 2025: Post-doc. Researcher at NAOJ (JSPS fellow)
- Apr. 2025- Assistant professor at the University of Tokyo

II. EDUCATION

- April 2016 March 2019: Graduate School of Science, The University of Tokyo, Japan Doctor of Philosophy in Astronomy, Thesis title: The nature of Lya emitters: SFR, stellar mass, and dark matter halo mass
- April 2014 March 2016: Graduate School of Science, The University of Tokyo, Japan
 Master of Science, Astronomy, Thesis title: Star Formation Activity and Its Diversity of Low-Mass Galaxies at Cosmic Noon
- April 2010 March 2014: Faculty of Science, The University of Tokyo, Japan, Bachelor of Science, Astronomy

III. Publication list

First author (refereed article)

- 1 ``First Infrared-Based Implications for the Dust Attenuation and Star Formation of Typical Ly α Emitters", H. Kusakabe, K. Shimasaku, K. Nakajima, & M. Ouchi, ApJL, 800, 2, 2015 [cited: 25].
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- 4 O ``The MUSE Hubble Ultra Deep Field Survey. XIV. Evolution of the Ly α emitter fraction from z = 3 to z = 6", H. Kusakabe, J. Blaizot, T. Garel, A. Verhamme, R. Bacon, J. Richard, T. Hashimoto, H. Inami, S. Conseil, B. Guiderdoni, A.B. Drake, E. Christian Herenz, J. Schaye, P. Oesch, J. Matthee, R. Anna Marino, K. Borello Schmidt, R. Pello, M. Maseda, F. Leclercq, J. Kerutt, & G. Mahler, A&A, 638, 2020 [cited: 53].
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Other article

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- 49 ``ALMA twenty-six arcmin^2 survey of GOODS-S at one millimeter (ASAGAO): Millimeter properties of stellar mass selected galaxies", Y. Yamaguchi, K. Kohno, B. Hatsukade, T. Wang, Y. Yoshimura, Y. Ao, J.S. Dunlop, E. Egami, D. Espada, S. Fujimoto, N.H. Hayatsu, R.J. Ivison, T. Kodama, H. Kusakabe, T. Nagao, M. Ouchi, W. Rujopakarn, K.-. ichi . Tadaki, Y. Tamura, Y. Ueda, H. Umehata, & W.-H. Wang, PASJ, 72, 4, 2020 [cited: 11].
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- ``CHORUS. III. Photometric and Spectroscopic Properties of Ly α Blobs at z = 4.9-7.0", H. Zhang, M. Ouchi, R. Itoh, T. Shibuya, Y. Ono, Y. Harikane, A.K. Inoue, M. Rauch, S. Kikuchihara, K. Nakajima, H. Yajima, S. Arata, M. Abe, I. Iwata, N. Kashikawa, S. Kawanomoto, S. Kikuta, M.A.R. Kobayashi, H. Kusakabe, K. Mawatari, T. Nagao, K. Shimasaku, & Y. Taniguchi, ApJ, 891, 2, 2020 [cited: 18].
- ``The MUSE Hubble Ultra Deep Field Survey. XIII. Spatially resolved spectral properties of Lyman α haloes around star-forming galaxies at z < 3", F. Leclercq, R. Bacon, A. Verhamme, T. Garel, J. Blaizot, J. Brinchmann, S. Cantalupo, A. Claeyssens, S. Conseil, T. Contini, T. Hashimoto, E.C. Herenz, H. Kusakabe, R.A. Marino, M. Maseda, J. Matthee, P. Mitchell, G. Pezzulli, J. Richard, K.B. Schmidt, & L. Wisotzki, A&A, 635, 2020 [cited: 71].
- ``ALMA 26 arcmin^2 Survey of GOODS-S at 1 mm (ASAGAO): Near-infrared-dark Faint ALMA Sources", Y. Yamaguchi, K. Kohno, B. Hatsukade, T. Wang, Y. Yoshimura, Y. Ao, K.I. Caputi, J.S. Dunlop, E. Egami, D. Espada, S. Fujimoto, N.H. Hayatsu, R.J. Ivison, T. Kodama, H. Kusakabe, T. Nagao, M. Ouchi, W. Rujopakarn, K.-. ichi . Tadaki, Y. Tamura, Y. Ueda, H. Umehata, W.-H. Wang, & M.S. Yun, ApJ, 878, 1, 2019 [cited: 61].
- `CHORUS. II. Subaru/HSC Determination of the Ly α Luminosity Function at z = 7.0: Constraints on Cosmic Reionization Model Parameter", R. Itoh, M. Ouchi, H. Zhang, A.K. Inoue, K. Mawatari, T. Shibuya, Y. Harikane, Y. Ono, H. Kusakabe, K. Shimasaku, S. Fujimoto, I. Iwata, M. Kajisawa, N. Kashikawa, S. Kawanomoto, Y. Komiyama, C.-H. Lee, T. Nagao, & Y. Taniguchi, ApJ, 867, 1, 2018 [cited: 56].
- ``SILVERRUSH. VI. A simulation of Ly α emitters in the reionization epoch and a comparison with Subaru Hyper Suprime-Cam survey early data", A.K. Inoue, K. Hasegawa, T. Ishiyama, H. Yajima, I. Shimizu, M. Umemura, A. Konno, Y. Harikane, T. Shibuya, M. Ouchi, K. Shimasaku, Y. Ono, H. Kusakabe, R. Higuchi, & C.-H. Lee, PASJ, 70, 3, 2018 [cited: 73].
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- 58 "SILVERRUSH. III. Deep optical and near-infrared spectroscopy for Ly α and UV-nebular lines of bright Ly α emitters at z = 6-7", T. Shibuya, M. Ouchi, Y. Harikane, M. Rauch, Y.

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- SILVERRUSH. II. First catalogs and properties of ~2000 Ly α emitters and blobs at z ~ 6-7 identified over the 14-21 deg^2 sky", T. Shibuya, M. Ouchi, A. Konno, R. Higuchi, Y. Harikane, Y. Ono, K. Shimasaku, Y. Taniguchi, M.A.R. Kobayashi, M. Kajisawa, T. Nagao, H. Furusawa, T. Goto, N. Kashikawa, Y. Komiyama, H. Kusakabe, C.-H. Lee, R. Momose, K. Nakajima, M. Tanaka, S.-Y. Wang, & S. Yuma, PASJ, 70, 2018 [cited: 68].
- "First data release of the Hyper Suprime-Cam Subaru Strategic Program", H. Aihara, R. Armstrong, S. Bickerton, J. Bosch, J. Coupon, H. Furusawa, Y. Hayashi, H. Ikeda, Y. Kamata, H. Karoji, S. Kawanomoto, M. Koike, Y. Komiyama, D. Lang, R.H. Lupton, S. Mineo, H. Miyatake, S. Miyazaki, T. Morokuma, Y. Obuchi, Y. Oishi, Y. Okura, P.A. Price, T. Takata, M.M. Tanaka, M. Tanaka, Y. Tanaka, T. Uchida, F. Uraguchi, Y. Utsumi, S.-Y. Wang, Y. Yamada, H. Yamanoi, N. Yasuda, N. Arimoto, M. Chiba, F. Finet, H. Fujimori, S. Fujimoto, J. Furusawa, T. Goto, A. Goulding, J.E. Gunn, Y. Harikane, T. Hattori, M. Hayashi, K.G. He{\I}miniak, R. Higuchi, C. Hikage, P.T.P. Ho, B.-C. Hsieh, K. Huang, S. Huang, M. Imanishi, I. Iwata, A.T. Jaelani, H.-Y. Jian, N. Kashikawa, N. Katayama, T. Kojima, A. Konno, S. Koshida, H. Kusakabe, A. Leauthaud, C.-H. Lee, L. Lin, Y.-T. Lin, R. Mandelbaum, Y. Matsuoka, E. Medezinski, S. Miyama, R. Momose, A. More, S. More, S. Mukae, R. Murata, H. Murayama, T. Nagao, F. Nakata, M. Niida, H. Niikura, A.J. Nishizawa, M. Oguri, N. Okabe, Y. Ono, M. Onodera, M. Onoue, M. Ouchi, T.-S. Pyo, T. Shibuya, K. Shimasaku, M. Simet, J. Speagle, D.N. Spergel, M.A. Strauss, Y. Sugahara, N. Sugiyama, Y. Suto, N. Suzuki, P.J. Tait, M. Takada, T. Terai, Y. Toba, E.L. Turner, H. Uchiyama, K. Umetsu, Y. Urata, T. Usuda, S. Yeh, & S. Yuma, PASJ, 70, 2018 [cited: 542].
- "The Hyper Suprime-Cam SSP Survey: Overview and survey design", H. Aihara, N. Arimoto, R. Armstrong, S. Arnouts, N.A. Bahcall, S. Bickerton, J. Bosch, K. Bundy, P.L. Capak, J.H.H. Chan, M. Chiba, J. Coupon, E. Egami, M. Enoki, F. Finet, H. Fujimori, S. Fujimoto, H. Furusawa, J. Furusawa, T. Goto, A. Goulding, J.P. Greco, J.E. Greene, J.E. Gunn, T. Hamana, Y. Harikane, Y. Hashimoto, T. Hattori, M. Hayashi, Y. Hayashi, K.G. He{\]}miniak, R. Higuchi, C. Hikage, P.T.P. Ho, B.-C. Hsieh, K. Huang, S. Huang, H. Ikeda, M. Imanishi, A.K. Inoue, K. Iwasawa, I. Iwata, A.T. Jaelani, H.-Y. Jian, Y. Kamata, H. Karoji, N. Kashikawa, N. Katayama, S. Kawanomoto, I. Kayo, J. Koda, M. Koike, T. Kojima, Y. Komiyama, A. Konno, S. Koshida, Y. Koyama, H. Kusakabe, A. Leauthaud, C.-H. Lee, L. Lin, Y.-T. Lin, R.H. Lupton, R. Mandelbaum, Y. Matsuoka, E. Medezinski, S. Mineo, S. Miyama, H. Miyatake, S. Miyazaki, R. Momose, A. More, S. More, Y. Moritani, T.J. Moriya, T. Morokuma, S. Mukae, R. Murata, H. Murayama, T. Nagao, F. Nakata, M. Niida, H. Niikura, A.J. Nishizawa, Y. Obuchi, M. Oguri, Y. Oishi, N. Okabe, S. Okamoto, Y. Okura, Y. Ono, M. Onodera, M. Onoue, K. Osato, M. Ouchi, P.A. Price, T.-S. Pyo, M. Sako, M. Sawicki, T. Shibuya, K. Shimasaku, A. Shimono, M. Shirasaki, J.D. Silverman, M. Simet, J. Speagle, D.N. Spergel, M.A. Strauss, Y. Sugahara, N. Sugiyama, Y. Suto, S.H. Suyu, N. Suzuki, P.J. Tait, M. Takada, T. Takata, N. Tamura, M.M. Tanaka, M. Tanaka, M. Tanaka, Y. Tanaka, T. Terai, Y. Terashima, Y. Toba, N. Tominaga, J. Toshikawa, E.L. Turner, T. Uchida,

- H. Uchiyama, K. Umetsu, F. Uraguchi, Y. Urata, T. Usuda, Y. Utsumi, S.-Y. Wang, W.-H. Wang, K.C. Wong, K. Yabe, Y. Yamada, H. Yamanoi, N. Yasuda, S. Yeh, A. Yonehara, & S. Yuma, PASJ, 70, 2018 [cited: 891].
- '`A Hard Ionizing Spectrum in z = 3-4 Ly α Emitters with Intense [O III] Emission: Analogs of Galaxies in the Reionization Era?", K. Nakajima, R.S. Ellis, I. Iwata, A.K. Inoue, H. Kusakabe, M. Ouchi, & B.E. Robertson, ApJL, 831, 1, 2016 [cited: 103].
- 'Bright and Faint Ends of Ly α Luminosity Functions at z = 2 Determined by the Subaru Survey: Implications for AGNs, Magnification Bias, and ISM H I Evolution", A. Konno, M. Ouchi, K. Nakajima, F. Duval, H. Kusakabe, Y. Ono, & K. Shimasaku, ApJ, 823, 1, 2016 [cited: 101].

IV. INVITED/CONTRIBUTED TALKS IN INTERNATIONAL CONFERENCES

- 64 "Search for metal-enriched haloes of z>2 galaxies with Sill*", 25th MUSE Busy Week, France, 2023. 06
- 65 "MXDF: Significant amount of hydrogen gas in the CGM around UV-selected galaxies at z=3-4 traced by Ly α haloes", The production and escape of Lyman photons through time and space, Online, 2022.01
- '`The general presence of a Ly α halo around high-z galaxies and its high incidence rate", SAZERAC, Online, 2021.06
- 67 "Late or patchy reionization suggested by the LAE fraction measured with HST and MUSE", EAS2020 \$13d, Online, 2020.07
- 68 ``The origin of diffuse Ly α halos around LAEs", Tokyo Spring Cosmic Lyman Alpha Workshop, Japan, 2018. 03
- 69 "Mass Assembly Efficiency of LAEs at z~2: Stellar & Halo Properties", The Snowbird Cosmic Lyman-Alpha Workshop, US, 2017.03
- 70 ``Dark matter halo and stellar properties of extremely low-mass galaxies at $z\sim2$ ", The 6th Subaru International Conference, Japan, 2016.12 +17 oral presentations and five poster presentations

V. INVITED TALKS in SEMINARS

- 71. "CGM observations in emission", 東京大学天文学教育研究センター談話会, 2023 年 11 月
- 72. "Gaseous hydrogen envelope of high-z galaxies observed with MUSE through Lya emission", 早稲田大学 Obsap コロキウム, 2021 年 5 月
- 73. "Constraining the reionization history with the LAE fraction measured with HST and MUSE", ExGal/Cosmology Seminar at UT Austin, アメリカ(remote), 2020 年 10 月
- 74. "The nature of Lya emitters: SFR, stellar mass, and dark matter halo mass", 東北大学談話会、2019年2月

75. "The nature of LAEs at z ~ 2: star formation activity and the origin of bright Lya halos", Durham University 談話会, イギリス, 2018 年 6 月 他. 国内外で 12 回のセミナー招待講演あり

VI. FELLOWSHIPS AND GRANTS

- 76 JSPS 特別研究員 PD (2023.04-2026.03) 2083.2 万円
- 77 JSPS 海外特別研究員 (2021.04-2023.03) 1255.6 万円
- 78 The Swiss Society for Astrophysics and Astronomy MERAC funding award 2020 5000 Euro
- 79 Swiss Travel support from Society Academic of Geneva 2020 1450 CHF
- 80 Swiss Government Excellence Scholarship for postdocs (2019.09-2020.08)36000 CHF
- 81 JSPS 特別研究員 DC1 (2016.04-2019.03) 約 1000 万円
- 82 JSPS 若手研究者海外挑戦プログラム (2018年, リョン天文台長期滞在) 約 160 万円
- 83 第88回、90回早川基金 旅費支援 合計約65万円

VII. TELESCOPE TIME

- 84 ALMA (PI) 、``Do there exist mini-SMGs at cosmic noon"、6.5 時間、2017.1.01618.S
- 85 Subaru/SWIMS (PI)、"Triple NB mapping of HI \& AGNs associated to HS1700 protocluster filaments"、2.5 夜、S22A0031N
- 86 VLT/MUSE (PI)、"Outflows and ionized circumgalactic medium of extremely metal-poor galaxies: the MUSE view"、24 時間、110.23S1
- 87 VLT/MUSE (PI)、"Outflows and ionized circumgalactic medium of extremely metal-poor galaxies: the MUSE view"、14 時間、111.24HB
- 88 MeerKAT (PI)、``MeerKAT confirmation of rich gas content of extremely metal-poor galaxies"、38.6 時間、MKT-24047

VIII. AWARD

- 88. 東京大学 2013 年度理学部長賞受賞 (理学部学生選抜海外派遣プログラム)
- 89. 2014 年度天文・天体物理若手夏の学校 銀河・銀河団セッション オーラルアワード 2 位受賞

IX. TEACHING EXPERIENCE

- 90. 東京大学前期教養課程 2024年度 S ターム「宇宙科学実習 Ⅱ」週 4 コマ
- 91. ジュネーブ大学理学部天文学専攻 2020-2022 年度「星間物質」演習 2 コマ
- 92. 東京大学理学系研究科天文学専攻 「木曽観測実習」「計算天文学」「物理実験」TA

- 93. ジュネーブ大学大学院天文学専攻 修士 1 年生研究指導 (Astrophysics Lab I+II) 2 名
 - Mr. Bastien Lacave (2021年9月-2022年1月)
 - Mr. Nikita Smolnikov (2021年2月-7月)
- 94. ジュネーブ大学天文学科 学部 3 年生研究指導 (TP3) 3 名
 - Mr. Laurent Dalla Pola (2021年2-4月)
 - Mr. Bastien Lacave (2020年9-11月)
 - Mr. Yannick Arthur Eyholzer (2019年9月-11月)

X. Service Activity

- 95. 日本天文学会 Code of Conduct/ハラスメント防止ガイドライン策定タスクフォース 2024年~
- 96. 論文査読 ApJ, ApJS, MNRAS 2019 年~
- 97. 観測提案査読 (Subaru, ESO) 2019 年~
- 98. SOC, 10th Galaxy evolution workshop, 台湾, 2024年8月, 2025年~
- 99. SOC, 銀河研究者のオープンフォーラム (Galaxy Evolution Community Knowledge-sharing Opportunity, GECKO) 2024年9月~
- 100. SOC, the 52nd Saas-Fee advanced course "The Circumgalactic Medium across cosmic time: an observational and modeling challenge", スイス, 2023 年 3 月
- 101. Editor, springer 社 "The Circumgalactic Medium across cosmic time: an observational and modeling challenge" (出版準備中)
- 102. LOC, Tokyo Spring Cosmic Lyman-alpha workshop (Sakura CLAW) 2018年3月