

CURRICULUM VITAE

PERSONAL INFORMATION

NAME Rieko Momose
NATIONALITY Japan
INSTITUTE The University of Tokyo
ADDRESS (Office) 7-3-1 Hongo, Bunkyo-ku, Tokyo 113-0033, JAPAN
TELEPHONE
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EDUCATION

2009 - 2012 Ph.D. in Department of Astronomy, Graduate School of Science,
The University of Tokyo, Tokyo, Japan
“ Environmental effect of star formation activities among nearby disk galaxies ” (adviser: Prof. Sachiko Okumura)

2007 - 2009 M.S. in Department of Astronomy, Graduate School of Science,
The University of Tokyo, Tokyo, Japan
“ Higher resolution study of star formation activity over bars and spiral structures in NGC 4303 ” (adviser: Prof. Sachiko Okumura)

2003 - 2007 B.S. in Natural and Environmental Science,
Course for Environmental Science and Education,
Faculty of Education,
Tokyo Gakugei University, Tokyo, Japan
“ Synchrotron radiation by relativistic electron from compact source ” (adviser: Prof. Hideo Nitta)

EXPERIENCE

April 2018 - Present JSPS fellow,
The University of Tokyo

May 2016 - March 2018 * Maternity and childcare leave *

November 2015 - March 2018 Assistant Research Scholar (MOST fellow),
National Tsing Hua University, Taiwan

April 2015 - October 2015 Research Experts,
National Astronomical Observatory of Japan

April 2014 - March 2015 Project Researcher,
Institute for Cosmic Ray Research, The University of Tokyo

April 2012 - March 2014 ICRR Fellow,
Institute for Cosmic Ray Research, The University of Tokyo

April 2009 - Research Assistant, Graduate School of Science,
March 2012 The University of Tokyo

MEMBERSHIP OF PROFESSIONAL SOCIETIES

2007 - Present Astronomical Society of Japan

LANGUAGE SKILLS

NATURAL Japanese (native), English (working)

TELESCOPE TIME AWARDED

* PI

- *Large-scale intensity mapping of Lyman-alpha emission around 7 QSOs at $z=2.2$*
2 nights on Subaru telescope, S17A-136

- *Large-scale intensity mapping of Lyman-alpha emission around 7 QSOs at $z=2.2$*
3.6 hours on CFHT, 16BT003

- *Pilot CO Follow-up of the MaNGA Survey*
48 hours on Nobeyama 45 m single dish telescope, CG141028

- *Shedding light on the completion of reionization by ALMA [CII] observations*
4.3 hours on ALMA, 2012.1.00602.S

- *$^{12}\text{CO}(J=1-0)$ mapping of one of the nearest Luminous Infrared barred spiral Galaxy NGC 1365*
29 hours on Mopra, M422

- *$^{12}\text{CO}(J=1-0)$ mapping of one of the nearest Luminous Infrared barred spiral Galaxy NGC 1365*
30 hours on Nobeyama 45 m single dish telescope, 081023

- *What makes the difference of star formation activity in bar, arm, nucleus?*
20 hours on Nobeyama 45 m single dish telescope, 078014

* CoI

- many hours including Nobeyama 45 m single dish telescope, ASTE, CARMA, ALMA, JCMT, CSO, IRAM 30m, Subaru telescope

Academic Award

- *Star formation efficiency in the barred spiral galaxy NGC 4303*
Poster Award, The 40th Summer School on Astronomy and Astrophysics of Young Astronomers in Japan, Aichi, August 2010

RESEARCH FUNDS

* PI

- *Unveiling gas cycling in terms of galaxy evolution traced by Ly α halos*
JSPS RPD fellow, JP18J40088, ~ 150k US\$ (17M JPY), April 2018 — Current

- *Full Amount of Airfare for Observations in Chile*
Foundation for Promotion as Astronomy, ~2k US\$ (233k JPY), November 2019

- *Galaxy Formation and Evolution Traced by Diffuse Lyman-alpha Emission around Star-forming Galaxies*
MOST fellow, 104-2112-M-007-021-MY3, ~140k US\$ (4.3M NTD),
November 2015 — March 2018

- *Half Amount of Travel Expense for the International Conference in Germany*
ASJ, The 79th Hayakawa Saito Foundation, ~870 US\$ (97k JPY), July 2012

- *Full Amount of Travel Expense for the International Conference and Summer School in the U.K.*
ASJ, The 70th Hayakawa Saito Foundation, ~1.9k US\$ (210k JPY), July 2010

- *Full Amount of Airfare for the International Conference and Summer School in the U.K.*
Foundation for Promotion as Astronomy, ~1.7k US\$ (183k JPY), August 2010

Publication List

Refereed publications:

- (1) *SIGNALS: I. Survey description*
Rousseau-Nepton, L. et al. (another 63 co-authors including **Momose, R.**), 2019, MNRAS, 489, 5530
- (2) *A young galaxy cluster in the old Universe*
Hashimoto, T., Goto, T., **Momose, R.**, Ho, C.-C., Makiya, R., Chiang, C.-Y., Kim, S.-J., 2019, MNRAS, 489, 2014
- (3) *Possible evolution of the circum-galactic medium around QSOs with QSO age and cosmic time revealed by Ly α haloes*
Momose, R., Goto, T., Utsumi, Y., Hashimoto, T., Chiang, C.-Y., Kim, S.-J., Kashikawa, N., Shimasaku, K., Miyazaki, S., 2019, MNRAS, 488, 120
- (4) *Ly α view around a $z = 2.84$ hyperluminous QSO at a node of the cosmic web*
Kikuta, S., Matsuda, Y., Cen, R., Steidel, C. C., Yagi, M., Hayashino, T., Imanishi, M., Komiyama, Y., **Momose, R.**, Saito, T., 2019, PASJ, 71, 2L
- (5) *The dominant origin of diffuse Ly α halos around Ly α emitters explored by spectral energy distribution fitting and clustering analysis*
Kusakabe, H., Shimasaku, K., **Momose, R.** et al., 2019, PASJ, 71, 55
- (6) *Infrared luminosity functions based on 18 mid-infrared bands: revealing cosmic star formation history with AKARI and Hyper Suprime-Cam*
Goto, T., Oi, N., Utsumi, Y., **Momose, R.** et al., 2019, PASJ, 71, 30
- (7) *Surface density: a new parameter in the fundamental metallicity relation of star-forming galaxies*
Hashimoto, T., Goto, T., & **Momose, R.**, 2018, MNRAS, 475, 4424
- (8) *A 16 deg² survey of emission-line galaxies at $z < 1.5$ in HSC-SSP PDR1*
Hayashi, M., Tanaka, M., Shimakawa, R., Furusawa, H., **Momose, R.**, Toyama, Y., Silverman, J. D., Kodama, T., Komiyama, Y., Leauthaud, A., Lin, Y.-T., Miyazaki, S., Nagao, T., Nishizawa, A. J., Ouchi, M., Shibuya, T., Tadaki, K., & Yabe, K., 2018, PASJ, 70, 17

- (9) *SILVERRUSH. III. Deep Optical and Near-Infrared Spectroscopy for Ly α and UV-Nebular Lines of Bright Ly α Emitters at $z = 6-7$*
Shibuya, T., Ouchi, M., Harikane, Y., Rauch, M., Ono, Y., Mukae, S., Higuchi, R., Kojikma, T., Yuma, S., Lee, C.-H., Furusawa, H., Konno, A., Martin, C. L., Shimasaku, K., Taniguchi, Y., Komabashi, M. A. R., Kajisawa, M., Nagao, T., Goto, T., Kashikawa, N., Kusakabe, H., **Momose, R.**, Nakajima, K., Tanaka, M., & Wang, S.-Y., 2018, PASJ, 70, 15
- (10) *SILVERRUSH. II. First Catalogs and Properties of $\sim 2,000$ Ly α Emitters and Blobs at $z \sim 6-7$ Identified over the $14-21$ deg 2 Sky*
Shibuya, T., Ouchi, M., Konno, A., Higuchi, R., Harikane, Y., Ono, Y., Shimasaku, K., Taniguchi, Y., Komabashi, M. A. R., Kajisawa, M., Nagao, T., Furusawa, H., Goto, T., Kashikawa, N., Komiyama, Y., Kusakabe, H., Lee, C.-H., **Momose, R.**, Nakajima, K., Tanaka, M., Wang, S.-Y., & Yuma, S., 2018, 70, 14
- (11) *First Data Release of the Hyper Suprime-Cam Subaru Strategic Program*
Aihara et al (another 107 co-authors including **Momose, R.**), 2018, PASJ, 70, 8
- (12) *The Hyper Suprime-Cam SSP Survey: Overview and Survey Design*
Aihara et al (another 142 co-authors including **Momose, R.**), 2018, PASJ, 70, 4
- (13) *Small-scale Intensity Mapping: Extended Ly α , H α , and Continuum Emission as a Probe of Halo Star Formation in High-redshift Galaxies*
Mas-Ribas, R., Dijkstra, M., Hennawi, J. F., Trenti, M., **Momose, R.**, & Ouchi, M., 2017, ApJ, 841, 19
- (14) *Statistical Properties of Diffuse Ly α Halos around Star-forming Galaxies at $z \sim 2$*
Momose, R., Ouchi, M., Nakajima, K., Ono, Y., Shibuya, T., Shimasaku, K., Yuma, S., Mori, M., & Umemura, M., 2016, MNRAS, 457, 2318
- (15) *ALMA Census of Faint 1.2 mm Sources Down to ~ 0.02 mJy: Extragalactic Background Light and Dust-poor, High- z Galaxies*
Fujimoto, S., Ouchi, M., Ono, Y., Shibuya, T., Ishigaki, M., Nagai, H., & **Momose, R.**, 2016, ApJS, 222, 1
- (16) *Sensitivity for 21 cm bispectrum from Epoch of Reionization*
Yoshiura, S., Shimabukuro, H., Takahashi, K., **Momose, R.**, Nakanishi, & H., Imai, H., 2015, MNRAS, 451, 266

- (17) *On the Diffuse Ly α Halo Around Ly α Emitting Galaxies*
Lake, E. A., Zheng, Z., Cen, R., Sadoun, R., **Momose, R.**, & Ouchi, M., 2015, ApJ, 806, 226
- (18) *Accelerated Evolution of Lyman-alpha Luminosity Function at $z > 7$ Revealed by the Subaru Ultra-Deep Survey for Lyman-alpha Emitters at $z = 7.3$*
Konno, A., Ouchi, M., Ono, Y., Shimasaku, K., Shibuya, T., Furusawa, H., Nakajima, K., Naito, Y., **Momose, R.**, Suraphong, Y., & Iye, M., 2014, ApJ, 797, 16
- (19) *Faint Submillimeter Galaxies Revealed by Multifield Deep ALMA Observations: Number Counts, Spatial Clustering, and Dark Submillimeter Emitters*
Ono, Y., Ouchi, M., Kurono, Y., & **Momose, R.**, 2014, ApJ, 795, 5
- (20) *Diffuse Lyman-alpha Halos around Galaxies at $z=2.2-6.6$: Implications for Galaxy Formation and Cosmic Reionization*
Momose, R., Ouchi, M., Nakajima, K., Ono, Y., Shibuya, T., Shimasaku, K., Yuma, S., Mori, M., & Umemura, M., 2014, MNRAS, 442, 110
- (21) *First Systematic Search for Oxygen-Line Blobs at High Redshift: Uncovering AGN Feedback and Star-Formation Quenching*
Yuma, S., Ouchi, M., Drake, A. B., Simpson, C., Shimasaku, K., Nakajima, K., Ono, Y., **Momose, R.**, Akiyama, M., Mori, M., & Umemura, M., 2013, ApJ, 779, 53
- (22) *An Intensely Star-Forming Galaxy at $z\sim 7$ with Low Dust and Metal Content Revealed by Deep ALMA and HST Observations*
Ouchi, M., Ellis, R., Ono, Y., Nakanishi, K., Kohno, K., **Momose, R.**, Kurono, Y., Ashby, M. L. N., Shimasaku, K., Wilner, S. P., Fazio, G. G., Tamura, Y., & Iono, D., 2013, ApJ, 778, 102
- (23) *Resolved Giant Molecular Clouds in Nearby Spiral GalaxiesL Insights from the CANON CO(1-0) Survey*
Donovan Meyer, J., Koda, J., **Momose, R.**, Mooney, T., Egusa, F., Carty, M., Kennicutt, R. C., Jr., Kuno, N., Rebolledo, D., Sawada, T., Scoville, N. Z., & Wong, T., 2013, ApJ, 772, 107
- (24) *Star Formation on Subkiloparsec Scale Triggered by Non-linear Processes in Nearby Spiral Galaxies*
Momose, R., Koda, J., Kennicutt, R. C., Jr., Egusa, F., Calzetti, D., Liu, G., Donovan Meyer, J., Okumura, S. K., Scoville, N. Z., Sawada, T., & Kuno, N., 2013, ApJL, 772, 13

- (25) *A Water Maser and NH₃ Survey of GLIMPSE Extended Green Objects*,
Cyganowski, C. J., Koda, J., Rosolowsky, E., Towers, S., Donovan Meyer, J., Egusa, F.,
Momose, R., & Robitaille, T. P., 2013, ApJ, 764, 41
- (26) *Physical Conditions in Molecular Clouds in the Arm and Interarm Regions of M51*,
Koda, J., Scoville, N. Z., Hasegawa, T., Calzetti, D., Donovan Meyer, J., Egusa, F.,
Kennicutt, R. C., Jr., Kuno, N., Louie, M., **Momose, R.**, Sawada, T., Sorai, K., & Umei, M.,
2012, ApJ, 761, 41
- (27) *Resolved Measurements of X_{CO} in NGC 6946*,
Donovan Meyer, J., Koda, J., **Momose, R.**, Fukuhara, M., Mooney, T., Towers, S., Egusa, F.,
Kennicutt, R. C., Jr., Kuno, N., Carty, M., Sawada, T., & Scoville, N. Z., 2012, ApJ, 744, 42
- (28) *The Super-linear Slope of the Spatially Resolved Star Formation Law in NGC 3521 and
NGC 5194 (M51a)*,
Liu, G., Koda, J., Calzetti, D., Fukuhara, M., & **Momose, R.**, 2011, ApJ, 735, 63
- (29) *Star Formation Efficiency in the Barred Spiral Galaxy NGC 4303*,
Momose, R., Okumura, S. K., Koda, J., & Sawada, T., 2010, ApJ, 721, 383

Non-refereed publications:

- (30) *Cosmic star formation history revealed by AKARI and Hyper Suprime-Cam*,
Goto, T., Oi, N., Kilerci Ecer, E., **Momose, R.**, Huang, T-C., Utsumi, Y., Matsuhara, H.,
Toba, Y., Ohshima, Y., Takagi, T., Wada, T., Malkan, M., Nakagawa, T., Kim, S. J., & the
AKARI NEP team, 2017, Proceedings of the “The Cosmic Wheel and the Legacy of the
AKARI archive: from galaxies and stars to planets and life”
- (31) *Surface density: a new parameter in the fundamental metallicity relation of star-forming
galaxies*,
Hashimoto, T., Goto, T., & **Momose, R.**, 2017, Proceedings of the “The Cosmic Wheel and
the Legacy of the AKARI archive: from galaxies and stars to planets and life”
- (32) *North Ecliptic Pole multi-wavelength survey : new optical data with Hyper Suprime-Cam
and near-future prospects with eROSITA*,
Oi, N., Matsuhara, H., Goto, T., Utsumi, Y., **Momose, R.**, Huang, T-C., Toba, Y., Im, M.,
Lee, H. K., O Kim, S. J., Miyaji, T., Krumpel, M., Murata, K., Ohshima, Y., Serjeant, S.,
Pearson, C., Nakagawa, T., Wada, T., Takagi, T., Matsuura, S., Shogaki, A., & NEP team,
2017, Proceedings of the “The Cosmic Wheel and the Legacy of the AKARI archive: from
galaxies and stars to planets and life”

(33) *The Resolved Kennicutt-Schmidt Law in Nearby Galaxies*

Momose, R., Koda, J., Kennicutt, R. C., Jr., Egusa, F., Okumura, S. K., Calzetti, D., Liu, G., Meyer, J. D., Scoville, N. Z., Sawada, T., & Kuno, N., 2012, IAUS, 292, 335

(34) *FAZZ, a FITS Cube/Image Browsing and Analyzing Tool in IDL,*

Ikeda, N., Kitamura, Y., Yoshida, A., Tatei, H., Onodera, S., & **Momose, R.**, 2010, ASPC, 434, 297

International Conferences:

- (35) **Momose, R.**, et al. “*What can we learn about the IGM-galaxy connection from 3D tomography map?*”, Subaru Telescope 20th Anniversary Conference, Hawaii, U.S., November, 2019 (Oral)
- (36) **Momose, R.**, et al. “*Lyman alpha halos around quasars at $z > 6$* ”, NEP Meeting 2019, Hsinchu, Taiwan, June, 2019 (Oral)
- (37) **Momose, R.**, et al. “*Lyman alpha halos around quasars at $z > 6$* ”, Extremely Big Eyes on the Early Universe, Chiba, Japan, March, 2019 (Oral)
- (38) **Momose, R.**, et al. “*Statistical properties of diffuse Ly α haloes around star-forming galaxies at $z \sim 2$* ”, Tokyo Spring Cosmic Lyman-Alpha Workshop (Sakura CLAW), Tokyo, Japan, March, 2018 (Oral)
- (39) **Momose, R.**, Koda, J., Kennicutt, R. C., Jr., Egusa, F., Okumura, S. K., Calzetti, D., Liu, G., Donovan Meyer, J., Scoville, N. Z., Sawada, T., & Kuno, N., “*Star Formation Activities Among Structures in Nearby Disc Galaxies*”, The Impact of Galactic Structure on Star Formation, Sapporo, February, 2014 (Oral)
- (40) **Momose, R.**, Ouchi, M., Nakajima, K., Ono, Y., Shimasaku, K., & S. Yuma., “*Evolution of Diffuse Ly α Halos Around Star-forming Galaxies at $z=2-7$* ”, Lyman Alpha as an Astrophysical Tool, Stockholm, September, 2013 (Oral)
- (41) **Momose, R.**, Koda, J., Kennicutt, R. C., Jr., Egusa, F., Okumura, S. K., Calzetti, D., Liu, G., Donovan Meyer, J., Scoville, N. Z., Sawada, T., & Kuno, N., “*Superlinear Slope of the Resolved Kennicutt-Schmidt Law in Nearby Galaxies*”, IAU Symposium 292, Beijing, August, 2012 (Poster)
- (42) **Momose, R.**, Koda, J., Kennicutt, R. C., Jr., Egusa, F., Okumura, S. K., Calzetti, D., Liu, G., Donovan Meyer, J., Scoville, N. Z., Sawada, T., & Kuno, N., “*The Resolved Kennicutt-Schmidt Law in Nearby Galaxies*”, Galactic Scale Star Formation, Heidelberg, Germany, July, 2012 (Poster)
- (43) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*Star Formation Efficiency in the Barred Spiral Galaxy*”, Molecules in Galaxies, Oxford, the United Kingdom, July, 2010 (Oral)

- (44) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*High resolution study of star formation activity in NGC 4303*” Millimeter and Submillimeter Astronomy at High Angular Resolution, Taipei, Taiwan, June, 2009 (Poster)

Domestic Conferences (Japan):

- (45) **Momose, R.**, et al. “*Diffuse Ly α halos around galaxies at $z > 6$* ”, Workshop for IFU instruments 2019, Tokyo, Japan, October, 2019 (Oral)
- (46) **Momose, R.**, et al. “*Ly α Halos around quasars at $z > 6$* ”, Astronomical Society of Japan (ASJ) Annual Meeting, Kumamoto, Japan, September, 2019 (Oral)
- (47) **Momose, R.**, et al. “*What can we learn about the IGM-galaxy connection from a 3D tomography map?*”, SKA-Japan Symposium 2019, Tokyo, Japan, September, 2019 (Oral)
- (48) **Momose, R.**, et al. “*The evolution of the circum-galactic medium around QSOs with QSO age and cosmic time revealed by Ly α halos*”, Subaru Users Meeting FY2018, Tokyo, Japan, January, 2019 (Oral)
- (49) **Momose, R.**, et al. “*Intensity Mapping around QSOs*”, Workshop for Intensity Mapping 2018, Tokyo, Japan, July, 2018 (Oral)
- (50) **Momose, R.**, et al. “*Diffuse Ly α Halos around High- z Star-Forming Galaxies*”, Astronomical Society of Japan (ASJ) Annual Meeting, Kobe, Japan, September, 2015 (Oral)
- (51) **Momose, R.**, et al. “*Mapping Nearby Galaxies at APO (MaNGA)*”, JCMT Workshop, Tokyo, Japan, September, 2014 (Poster)
- (52) **Momose, R.**, et al. “*Evolution of Lyman-alpha Emitters Traced by Lyman-alpha Halos*”, Workshop of Galaxy Evolution 2014, Tokyo, Japan, June, 2014 (Oral)
- (53) **Momose, R.**, et al. “*Evolution of Diffuse Ly α Halos around Star-Forming Galaxies*”, Observation Cosmology Workshop 2013, Tokyo, Japan, December, 2013 (Oral)
- (54) **Momose, R.**, et al. “*Evolution of Diffuse Ly α Halos around Star-Forming Galaxies at $z = 2-7$* ”, High- z galaxies and Cosmic Reionization Workshop, Hyogo, Japan, November, 2013 (Oral)

- (55) **Momose, R.**, et al. “*Star Formation On Sub-kpc Scale Triggered By Non-linear Processes In Nearby Spiral Galaxies*”, Meeting of the Program for Younger Researcher Overseas Visits, Chiba, Japan, April, 2013 (Oral)
- (56) **Momose, R.**, Okumura, S. K., Koda, J., Kennicutt, R. C., Jr, Donovan Meyer, J., Calzetti, D., Liu, G., & Egusa, F., “*Star formation activities among galactic structures*”, Astronomical Society of Japan (ASJ) Annual Meeting, Oita, Japan, September, 2012 (Poster)
- (57) **Momose, R.**, “*The Resolved Kennicutt-Schmidt Law in Nearby Galaxies*”, Mini-Workshop for “Kinematics, ISM and Star Formation in Galaxies”, Tokyo, Japan, August, 2012 (Oral)
- (58) **Momose, R.**, Okumura, S. K., Koda, J., Kennicutt, R. C., Jr., Donovan Meyer, J., Calzetti, D., Liu, G., & Egusa, F., “*Superlinear slope of the resolved Kennicutt-Schmidt law*”, ASJ Annual Meeting, Kyoto, Japan, March, 2012 (Oral)
- (59) **Momose, R.**, Koda, J., Kennicutt, R. C., Jr., Donovan Meyer, J., Egusa, F., Kurono, Y., & Okumura, S. K., “*Combining method for mosaic observation with CARMA and NRO45m telescope*”, GCOE Research Assistant Camp, Shizuoka, Japan, February, 2011 (Poster)
- (60) **Momose, R.**, Koda, J., Kennicutt, R. C., Jr., Donovan Meyer, J., Egusa, F., Kurono, Y., & Okumura, S. K., “*Combining method for mosaic observation with CARMA and NRO45m telescope*”, ALMA User’s Meeting, Tokyo, Japan, January, 2011 (Poster)
- (61) **Momose, R.**, “*Proposal for NGC 1365*”, Nobeyama Radio Observatory (NRO) Workshop: Nearby Galaxies, Tokyo, Japan, September, 2010 (Oral)
- (62) **Momose, R.**, “*Star formation efficiency in the Barred Spiral Galaxy NGC 4303*”, Summer School for Young Astronomers, Aichi, Japan, August, 2010 (Poster)
- (63) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*High resolution study of star formation activity in NGC 4303*”, ALMA User’s Meeting, Tokyo, Japan, December, 2009 (Poster)

- (64) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*Star formation and gas kinematics in NGC 4303*”, NRO Workshop: Studies of Nearby Galaxies by High Resolution Observations of sub-mm/mm Wavelength and Latest Theoretical Model, Kagoshima, Japan, November, 2009 (Oral)
- (65) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*Star formation activities in the barred spiral galaxy, NGC 4303 - II -*”, ASJ Annual Meeting, Yamaguchi, Japan, September, 2009 (Poster)
- (66) **Momose, R.**, “*Capabilities of observations to high-z objects using NRO 45 m telescope*”, NRO User’s Meeting, Nagano, Japan, July, 2009 (Oral)
- (67) **Momose, R.**, Okumura, S. K., Muraoka, K., Tosaki, T., & Kohno, K., “*12CO(J=1-0) observation of nearby LIRG NGC 1365*”, NRO User’s Meeting, Nagano, Japan, July, 2009 (Poster)
- (68) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*Star formation activities in the barred spiral galaxy, NGC 4303 - I -*”, ASJ Annual Meeting, Okayama, Japan, September, 2008 (Oral)
- (69) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*Comparison of star formation activities in NGC 4303*”, NRO User’s Meeting, Nagano, Japan, July, 2008 (Poster)

Domestic Conferences (the United States):

- (70) **Momose, R.**, Okumura, S. K., Koda, J., & Sawada, T., “*High resolution study of star formation activity in NGC 4303*”, Tri-State Astronomy Conference, New York, the United States, October, 2009 (Poster)

Domestic Conferences (the Republic of China):

- (71) **Momose, R.**, et al. “*Diffuse Ly α Halos around High-redshift Star-Forming Galaxies*”, Annual Meeting of the Physical Society of the Republic of China, Kaohsiung, the Republic of China, January, 2016 (Oral)

Public Talk:

- (72) **Momose, R.**, “*Lets’s trip in the Universe!*”, ABI-STA special class, Tokyo, June, 2016
- (73) **Momose, R.**, Science Agora TA, Tokyo, November, 2014
- (74) **Momose, R.**, “*Talks about Gas around Galaxies*”, Hongo Uchjyuku, Tokyo, June, 2014

- (75) **Momose, R.**, “*Galaxies in the Universe*”, Spring Science Program For Female High-school Students, Chiba, March, 2014
- (76) **Momose, R.**, “*How to study “star formation” in galaxies*”, Marunouchi Uchjyuku, Tokyo, September, 2012
- (77) **Momose, R.**, “*Astronomy Astronomer*”, Science Fair, Ibaraki, August, 2007
- (78) Many lectures as an interpreter of NAOJ Mitaka stargazing (May 2003—March 2012)
I had also been in the position of president of organizing staff of NAOJ Mitaka stargazing during September 2008 to August 2009

Classes (teaching experiences):

- (79) “*The latest study for galaxies: Various views to study galaxy evolution*”, Yokohama branch of Asahi Culture School, December, 2019
- (80) TA of Observational experiments of NMA for undergrad students, Nobeyama Radio Observatory, February, 2010

Seminars:

- (81) “*Environmental dependence of galactic properties traced by Ly α forest absorption*”, Kavli IPMU University of Tokyo, March, 2020
- (82) “*Environmental dependence of galactic properties traced by Ly α forest absorption*”, Edinburgh University, January, 2020
- (83) “*Environmental dependence of galactic properties traced by Ly α forest absorption*”, Geneva Observatory, January, 2020
- (84) “*Evolution of galaxies traced by Ly α halos*”, UC Santa Cruz, May, 2019
- (85) “*Evolution of galaxies traced by Ly α halos*”, IoA University of Tokyo, February, 2019
- (86) “*Evolution of galaxies traced by Ly α halos*”, Shinshu University, November, 2018

- (87) “*Diffuse Ly α halos around high- z star-forming galaxies*”, DoA University of Tokyo, June, 2018
- (88) “*Diffuse Ly α halos around high- z star-forming galaxies I*”, IoA National Tsing Hua University Taiwan, April, 2016
- (89) “*Shed light on galaxy evolution and cosmic reionization traced by Ly α halos*”, Ehime University, October, 2015
- (90) “*Shed light on galaxy evolution and cosmic reionization traced by Ly α halos*”, Tohoku University, February, 2015
- (91) “*Shed light on galaxy evolution and cosmic reionization traced by Ly α halos*”, Rikkyo University, September, 2014
- (92) “*Observational approaching for shed light on cosmic reionization*”, Kumamoto University, July, 2014
- (93) “*Observational approaching for shed light on galaxy evolution*”, Kumamoto University, July, 2014
- (94) “*Evolution of Diffuse Ly α halos around Star-forming Galaxies at $z = 2-7$* ”, Kavli IPMU University of Tokyo, March, 2014
- (95) “*The Resolved Kennicutt-Schmidt Law in Nearby Galaxies*”, Institute for Theoretical Astrophysics University of Heidelberg, August, 2012
- (96) “*The Resolved Kennicutt-Schmidt Law in Nearby Galaxies*”, Institute of Cosmic Ray Research University of Tokyo, June, 2012