

As of February 1st, 2024

Contact Information

Haystack Observatory +1(617)715-5579 (Tel)
Massachusetts Institute of Technology +1(617)715-5590 (Fax)
99 Millstone Rd, Westford, MA 01886, USA kakiyama@mit.edu (e-mail)

<https://sites.mit.edu/kazuakiyama> (web)

ORCID: [0000-0002-9475-4254](https://orcid.org/0000-0002-9475-4254)

[Google Scholar](#), [SAO/NASA ADS](#)

Education

2015 March Ph.D. Astronomy , University of Tokyo, Tokyo, Japan
2012 March M.Sc. Astronomy, University of Tokyo, Tokyo, Japan
2010 March B.Sc. Physics, Hokkaido University, Hokkaido, Japan
2005 March Aoyama Gakuin High School, Tokyo, Japan

Professional History

2017 September – Present
[Research Scientist, Massachusetts Institute of Technology, Haystack Observatory, MA, USA](#)

2017 September – 2020 August
[Jansky Fellow, National Radio Astronomy Observatory, VA, USA](#)
(Host Institution: [Massachusetts Institute of Technology Haystack Observatory, MA, USA](#))

2016 September – 2017 August
Postdoctoral Associate, Massachusetts Institute of Technology, Haystack Observatory, MA, USA

2015 September – 2017 August
Postdoctoral Fellow for Research Abroad, Japan Society for the Promotion of Science
(Host Institution: [Massachusetts Institute of Technology, Haystack Observatory, MA, USA](#))

2015 April – 2015 August
Research Assistant, National Astronomical Observatory of Japan, Tokyo, Japan

2012 April – 2015 March
Research Fellow (DC1), Japan Society for the Promotion of Science
(Host Institution: University of Tokyo, Tokyo, Japan)

Visiting Appointments / Affiliates

2017 February – Present
[Affiliate, Harvard University, Black Hole Initiative, MA, USA](#)

2016 April – Present
Special Visiting Researcher, National Astronomical Observatory of Japan, Tokyo, Japan

Honor, Awards and Scholarship

- 2021 January 28 [20 Under 40: Young Shapers of the Future \(Science and Technology\)](#), Encyclopedia Britannica
- 2021 January 8 [2021 Group Award](#), Royal Astronomical Society, UK
(As a member of the Event Horizon Telescope Collaboration)
- 2020 October 28 [2020 EHT Early Career Award](#), Event Horizon Telescope Collaboration
- 2020 April 7 [The 2020 Young Scientists' Prize](#), Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan
- 2020 March 12 [Nelson P. Jackson Aerospace Award](#), National Space Club and Foundation, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2020 February 18 [The 2020 \(FY2019\) Young Astronomer Award](#), Astronomical Society of Japan, Japan
- 2020 January 7 [2020 Bruno Rossi Prize](#), American Astronomical Society, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2019 December 27 [Einstein Medal 2020](#), Albert Einstein Society, Switzerland
(As a member of the Event Horizon Telescope Collaboration)
- 2019 December 16 [The best Science Stories of year 2019](#), Science Magazine, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2019 November 19 [American Ingenuity Award in Physical Sciences 2019](#),
Smithsonian Institution, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2019 September 5 [The 2020 Breakthrough Prize for the Fundamental Physics](#), Fundamental Physics Prize Foundation, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2019 May 9 [NSF Diamond Achievement Award](#), National Science Foundation, USA
(As a member of the Event Horizon Telescope Collaboration)
- 2017 September 1 [2017 Jansky Fellowship Program](#), National Radio Astronomy Observatory, USA
(the first Jansky Fellow from Japan)
- 2015 March 25 [The Representative of the Graduating Students](#), Graduate School of Science, University of Tokyo, Japan
- 2015 March 24 [Research Award](#), Graduate School of Science, University of Tokyo, Japan
- 2015 March 23 [President Award](#), University of Tokyo, Japan
- 2010 March 27 [Clark Award](#), Hokkaido University Clark Memorial Foundation, Japan
Note: I received this award because I graduated from the Hokkaido University as the top student of the Department of Physics, School of Science.
- 2007 April 1st – 2010 March 31
Scholarship Student, Inoue Scholarship Foundation, Japan
- 2007 June 27 [Nitobe Award](#), Hokkaido University, Japan

Grant History

- 2021 July – Present
[NSF-2107681 "Imaging the Dynamic Atmospheres of Evolved Stars at Radio Wavelengths"](#),

National Science Foundation, USA,
Lynn Matthews (PI) and *Kazunori Akiyama* (co-PI)

2020 October – Present

North American ALMA Study Program Cycle 8
“Beyond black hole images: extending new imaging techniques from the EHT to ALMA”,
National Radio Astronomy Observatory, USA,
Lynn Matthews (PI) (see notes)

2021 February – August

[Next Generation Very Large Array Community Studies Program](#)
“Exploring RML Reconstruction for Stellar Imaging with the ngVLA II: Assessment of Calibration Effects”,
National Radio Astronomy Observatory, USA,
Kazunori Akiyama (PI) and Lynn Matthews (co-I)

2019 August – September

[Next Generation Very Large Array Community Studies Program](#)
“Exploring Sparse Model Image Reconstruction for ngVLA Imaging Applications”,
National Radio Astronomy Observatory, USA,
Lynn Matthews (PI) (see notes)

2017 September – Present

Research Budgets for the Jansky Fellow,
“Imaging the Magnetized Plasma near the Event Horizon of Black Holes”
National Radio Astronomy Observatory, USA,
Kazunori Akiyama (PI)

2016 September – Present

[NSF-1614868 “Shaping the Narrow Jets of Material from Supermassive Black Holes”](#),
National Science Foundation, USA,
Vincent L. Fish (PI), Colin J. Lonsdale (see notes)

2012 April – 2015 March

Grant-in-Aid for JSPS Fellows,
Japan Society of Promotion of Science, Japan
Kazunori Akiyama (PI)

Notes: I’m a collaborator of some programs proposed during my postdoc period since I was not eligible to be the PI or a co-I of these proposals under MIT’s policy. However, I made a significant contribution to the proposal and work of this program including planning detailed science cases, drafting the proposal and work after the approval of the grant.

Teaching/Mentoring Experiences

2013 April – Present

Mentor for 4 Graduate Students
- Hiroki Okino (University of Tokyo; 2018 April – 2023 March)
- Masayuki Yamaguchi (University of Tokyo; 2016 September — 2022 March)
- Kazuki Kuramochi (University of Tokyo; 2014 April – 2018 December)
- Hikaru Chida (Tokai University; 2013 April – 2015 March)

2013 April – Present (every summer from June to August)

Mentor for more than 10 Undergraduate Students at Universities and Colleges in USA,
[Research Experience for Undergraduates \(REU\) Program, MIT Haystack Observatory](#)

2013 June – August

Mentor for 1 Pre-college Student
AGMUS Pre-College Summer Internship Program, MIT Haystack Observatory

2012 August

Teaching Assistant for Observation Experiments of Radio Astronomy,
NAOJ Mizusawa VLBI Observatory, a course of Ryukyu University, Japan

2010 August

Mentor for 5 High School Students,
Research Opportunity Program for High School Students,
NAOJ Mizusawa VLBI Observatory, Japan

Professional Societies and Research Groups

- 2022 – Present [Large Submillimeter Telescope Collaboration](#)
- 2021 – Present [Next Generation Event Horizon Telescope Collaboration, SpectrumX Collaboration](#)
- 2019 – Present [Japan Radio Astronomy Forum, American Astronomical Society](#)
- 2017 – Present [Event Horizon Telescope Collaboration](#)
- 2016 – Present [Japan SKA Consortium](#)
- 2011 – Present [Japan VLBI Consortium, KaVA / EAVN Collaborations,](#)
- 2010 – Present [Astronomical Society of Japan](#)

Editorial Activities

Referee for Peer-reviewed Journals

- 2021 – Present Acta Astronautica
- 2020 – Present Nature Astronomy
- 2019 – Present Publications of the Astronomical Society of the Pacific, MDPI Journals (Galaxies, Universe), Advances in Space Research
- 2017 – Present Monthly Notices of the Royal Astronomical Society
- 2016 – Present AAS Journals (The Astrophysical Journal, The Astrophysical Journal Letters, The Astronomical Journal)
- 2015 – Present Journal of Physics: Conference Series, Publications of the Astronomical Society of Japan

Editor for Peer-reviewed Journals

- 2022 – Present [Special Issue of the Royal Astronomy Society Techniques and Instrument “Next-Generation Interferometric Image Reconstruction, from SKA to ngEHT”](#)

Committee Service

International Conferences

- 2024 July Co-chair of a special session, European Astronomical Society Meeting 2024, Padova, Italy
- 2024 June Chair of Science Organizing Committee, Black Hole Explorer Japan Workshop, Toyko, Japan
- 2024 February Organizer, 40 Years Evolution of Radio Interferometry in Japan, Tokyo, Japan

- 2023 August Convener of a session at Commission J of the URSI General Assembly and Scientific Symposium 2023, Hokkaido, Japan
- 2023 July Co-chair of a special session, European Astronomical Society Meeting 2023, Krakow, Poland
- 2023 February Session Organizer, International BASP Frontiers workshop 2023, Switzerland
- 2022 September Organizer of a special session, Astronomical Society of Japan Annual Fall Meeting 2022, Niigata, Japan
- 2022 June Organizer of the EHT special session, European Astronomical Society Meeting 2022, Valencia, Spain
- 2022 June Organizer of the EHT special session, American Astronomical Society Meeting 240, CA, USA
- 2022 January Organizer of the EHT special session, American Astronomical Society Meeting 239, UT, USA (canceled due to the pandemic)
- 2021 January Organizer of a special session, International BASP Frontiers workshop 2023, Switzerland (canceled due to the pandemic)
- 2020 May Organizer, EHT Imaging Workshop 2020, remotely held
- 2019 December Session Organizer, EHT Collaboration Meeting 2019, HI, USA
- 2019 July Science Organizing Committee, EHT Polarimetry Workshop, Max Planck Institute of Radio Astronomy, Germany
- 2018 November Science Organizing Committee, EHT 2018, Nijmegen, Netherlands
- 2018 July Organizer, The 2nd EHT Imaging workshop, Organizer, the Black Hole Initiative at Harvard University, MA, USA
- 2017 October Organizer, The 1st EHT Imaging workshop, Organizer, the Black Hole Initiative at Harvard University, MA, USA
- 2015 July Local Organizing Committee, KaVA SWG Meeting & 8th East Asia VLBI Workshop, Hokkaido University, Japan
- 2012 December Organizer, East-Asian sub-mm VLBI workshop, National Astromonomical Observatory of Japan, Japan
- 2010 December Local Organizing Committee, Towards a root of AGN jets: Recent progress, National Astromonomical Observatory of Japan, Japan,

Professional Societies

- 2022 October – Present Coordinator of the Algorithm & Inference Working Group, Next Generation Event Horizon Telescope Collaboration
- 2022 July – Present Science Council, Event Horizon Telescope Collaboration
- 2021 May – 2022 September Co-chair of the Speakers Bureau, Event Horizon Telescope Collaboration
- 2017 May – 2022 September Coordinator of the Imaging Working Group, Event Horizon Telescope Collaboration

Referee for Telescope Proposals

- 2021 – Present East Asian VLBI Network (EAVN; 2021b)

Referee for Grant Proposals

2019 – Present National Research, Development and Innovation Office, Hungary (2019, 2020)

Selected Astronomical Software Packages

2015 – Present Primary Developer, “SMILI: Sparse Modeling Imaging Library for Interferometry”,
An Open-source Imaging Software Package for Radio Interferometry,
[GitHub website](#), [Documentation](#)

List of Publications: Summary

Refereed Journal Publications	109 papers (12 First or Corresponding Author Papers)
Non-refereed White Papers or Review Articles	5 papers (1 Corresponding-author and 4 Co-author Papers)
Other Non-Refereed Journal Publications	15 papers (2 Corresponding-author and 13 Co-author Papers)
Indices for All Publications	h-index:47, m-index:3.4, g-index:113, i10-index:92, i100-index:24, tori index:4.8, riq index:156, read10-index: 505.8
Online List of Publications	Astrophysics Data System Google Scholar

Refereed Journal Publications

109. Event Horizon Telescope Collaboration, [Akiyama, K.](#), Alberdi, A., et al., “*The persistent shadow of the supermassive black hole of M 87. I. Observations, calibration, imaging, and analysis*”, [Astronomy and Astrophysics](#), **681**, (2024)
108. Torne, P., Liu, K., Eatough, R. P., et al., “*A Search for Pulsars around Sgr A* in the First Event Horizon Telescope Data Set*”, [The Astrophysical Journal](#), **959**, (2023)
107. Fuentes, A., Gómez, J. L., Martí, J. M., Perucho, M., Zhao, G.-Y., Lico, R., Lobanov, A. P., Bruni, G., Kovalev, Y. Y., Chael, A., [Akiyama, K.](#), et al., “*Filamentary structures as the origin of blazar jet radio variability*”, [Nature Astronomy](#), **7**, (2023)
106. Roelofs, F., Johnson, M. D., Chael, A., Janssen, M., Wielgus, M., Broderick, A. E., [Akiyama, K.](#), et al., “*Polarimetric Geometric Modeling for mm-VLBI Observations of Black Holes*”, [The Astrophysical Journal](#), **957**, (2023)
105. Event Horizon Telescope Collaboration, [Akiyama, K.](#), Alberdi, A., et al., “*First M87 Event Horizon Telescope Results. IX. Detection of Near-horizon Circular Polarization*”, [The Astrophysical Journal](#), **957**, (2023)
104. Cui, Y., Hada, K., Kawashima, T., et al., “*Precessing jet nozzle connecting to a spinning black hole in M87*”, [Nature](#), **621**, (2023)
103. Emami, R., Ricarte, A., Wong, G. N., Palumbo, D., Chang, D., Doeleman, S. S., Broderick, A. E., Narayan, R., Wielgus, M., Blackburn, L., Prather, B. S., Chael, A. A., Anantua, R., Chatterjee, K., Martí-Vidal, I., Gómez, J. L., [Akiyama, K.](#), et al., “*Unraveling Twisty Linear Polarization Morphologies in Black Hole Images*”, [The Astrophysical Journal](#), **950**, (2023)
102. Prather, B. S., Dexter, J., Moscibrodzka, M., Pu, H.-Y., Bronzwaer, T., Davelaar, J., Younsi, Z., Gammie, C. F., Gold, R., Wong, G. N., [Akiyama, K.](#), et al., “*Comparison of Polarized Radiative Transfer Codes Used by the EHT Collaboration*”, [The Astrophysical Journal](#), **950**, (2023)
101. Ro, H., Kino, M., Sohn, B. W., Hada, K., Park, J., Nakamura, M., Cui, Y., Yi, K., Chung, A., Hodgson, J., Kawashima, T., An, T., Trippe, S., Algaba, J.-C., Kim, J.-Y., Sawada-Satoh, S., Wajima, K., Shen, Z., Cheng, X., Cho, I., et al., “*Spectral analysis of a parsec-scale jet in M 87: Observational constraint on the magnetic field strengths in the jet*”, [Astronomy and Astrophysics](#), **673**, (2023)

100. Lu, R.-S., Asada, K., Krichbaum, T. P., Park, J., Tazaki, F., Pu, H.-Y., Nakamura, M., Lobanov, A., Hada, K., Akiyama, K., Kim, J.-Y., Marti-Vidal, I., Gómez, J. L., Kawashima, T., Yuan, F., Ros, E., Alef, W., Britzen, S., Bremer, M., Broderick, A. E., et al., “A ring-like accretion structure in M87 connecting its black hole and jet”, *Nature*, **616**, (2023)
99. Johnson, M. D., Akiyama, K., Blackburn, L., Bouman, K. L., Broderick, A. E., Cardoso, V., Fender, R. P., Fromm, C. M., Galison, P., Gómez, J. L., Haggard, D., Lister, M. L., Lobanov, A. P., Markoff, S., Narayan, R., Natarajan, P., Nichols, T., Pesce, D. W., Younsi, Z., Chael, A., et al., “Key Science Goals for the Next-Generation Event Horizon Telescope”, *Galaxies*, **11**, (2023)
98. Giovannini, G., Cui, Y., Hada, K., Yi, K., Ro, H., Sohn, B. W., Takamura, M., Buttaccio, S., D’Ammando, F., Giroletti, M., Hagiwara, Y., Kino, M., Kravchenko, E., Maccaferri, G., Melnikov, A., Niinuma, K., Orienti, M., Wajima, K., Akiyama, K., Doi, A., et al., “The Past and Future of East Asia to Italy: Nearly Global VLBI”, *Galaxies*, **11**, (2023)
97. Tazaki, F., Cui, Y., Hada, K., Kino, M., Cho, I., Zhao, G.-Y., Akiyama, K., Mizuno, Y., Ro, H., Honma, M., Lu, R.-S., Shen, Z.-Q., Cui, L., & Yonekura, Y., “Super-Resolved Image of M87 Observed with East Asian VLBI Network”, *Galaxies*, **11**, (2023)
96. Issaoun, S., Pesce, D. W., Roelofs, F., Chael, A., Dodson, R., Rioja, M. J., Akiyama, K., Aran, R., Blackburn, L., Doeleman, S. S., Fish, V. L., Fitzpatrick, G., Johnson, M. D., Narayanan, G., Raymond, A. W., & Tilanus, R. P. J., “Enabling Transformational ngEHT Science via the Inclusion of 86 GHz Capabilities”, *Galaxies*, **11**, (2023)
95. Jorstad, S., Wielgus, M., Lico, R., Issaoun, S., Broderick, A. E., Pesce, D. W., Liu, J., Zhao, G.-Y., Krichbaum, T. P., Blackburn, L., Chan, C.-. kwan ., Janssen, M., Ramakrishnan, V., Akiyama, K., et al., “The Event Horizon Telescope Image of the Quasar NRAO 530”, *The Astrophysical Journal*, **943**, (2023)
94. Kauffmann, J., Rajagopalan, G., Akiyama, K., Fish, V., Lonsdale, C., Matthews, L. D., & Pillai, T. G. S., “The Haystack Telescope as an Astronomical Instrument”, *Galaxies*, **11**, (2023)
- 93. Akiyama, K. (Corresponding Author)**, Kauffmann, J., Matthews, L. D., Moriyama, K., Koyama, S., & Hada, K., “Millimeter/Submillimeter VLBI with a Next Generation Large Radio Telescope in the Atacama Desert”, *Galaxies*, **11**, (2023)
92. Akiyama, K., Algaba, J.-C., An, T., Asada, K., Asanok, K., Byun, D.-Y., Chanapote, T., Chen, W., Chen, Z., Cheng, X., Chibueze, J. O., Cho, I., Cho, S.-H., Chung, H.-S., Cui, L., Cui, Y., Doi, A., Dong, J., Fujisawa, K., Gou, W., et al., “Overview of the Observing System and Initial Scientific Accomplishments of the East Asian VLBI Network (EAVN)”, *Galaxies*, **10**, (2022)
91. Okino, H., Akiyama, K., Asada, K., Gómez, J. L., Hada, K., Honma, M., Krichbaum, T. P., Kino, M., Nagai, H., Bach, U., Blackburn, L., Bouman, K. L., Chael, A., Crew, G. B., Doeleman, S. S., Fish, V. L., Goddi, C., Issaoun, S., Johnson, M. D., Jorstad, S., et al., “Collimation of the Relativistic Jet in the Quasar 3C 273”, *The Astrophysical Journal*, **940**, 65 (2022)
90. Tsunetoe, Y., Mineshige, S., Kawashima, T., Ohsuga, K., Akiyama, K., & Takahashi, H. R., “Diverse Polarimetric Features of AGN Jets from Various Viewing Angles: Towards a Unified View”, *Galaxies*, **10**, 103 (2022)
89. Issaoun, S., Wielgus, M., Jorstad, S., Krichbaum, T. P., Blackburn, L., Janssen, M., Chan, C.-. kwan ., Pesce, D. W., Gómez, J. L., Akiyama, K., et al., “Resolving the Inner Parsec of the Blazar J1924-2914 with the Event Horizon Telescope”, *The Astrophysical Journal*, **934**, 145 (2022)
88. Zhao, G.-Y., Gómez, J. L., Fuentes, A., Krichbaum, T. P., Traianou, E., Lico, R., Cho, I., Ros, E., Komossa, S., Akiyama, K., et al., “Unraveling the Innermost Jet Structure of OJ 287 with the First GMVA + ALMA Observations”, *The Astrophysical Journal*, **932**, 72 (2022)

87. Tsunetoe, Y., Mineshige, S., Kawashima, T., Ohsuga, K., Akiyama, K., & Takahashi, H. R., “*Investigating the Disk-Jet Structure in M87 through Flux Separation in the Linear and Circular Polarization Images*”, [The Astrophysical Journal](#), **931**, 25 (2022)
86. Broderick, A. E., Gold, R., Georgiev, B., Pesce, D. W., Tiede, P., Ni, C., Moriyama, K., Akiyama, K., et al., “*Characterizing and Mitigating Intraday Variability: Reconstructing Source Structure in Accreting Black Holes with mm-VLBI*”, [The Astrophysical Journal](#), **930**, L21 (2022)
85. Georgiev, B., Pesce, D. W., Broderick, A. E., et al., “*A Universal Power-law Prescription for Variability from Synthetic Images of Black Hole Accretion Flows*”, [The Astrophysical Journal](#), **930**, L20 (2022)
84. Wielgus, M., Marchili, N., Martí-Vidal, I., et al., “*Millimeter Light Curves of Sagittarius A* Observed during the 2017 Event Horizon Telescope Campaign*”, [The Astrophysical Journal](#), **930**, L19 (2022)
83. Farah, J., Galison, P., Akiyama, K., et al., “*Selective Dynamical Imaging of Interferometric Data*”, [The Astrophysical Journal](#), **930**, L18 (2022)
82. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. VI. Testing the Black Hole Metric*”, [The Astrophysical Journal](#), **930**, L17 (2022)
81. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. V. Testing Astrophysical Models of the Galactic Center Black Hole*”, [The Astrophysical Journal](#), **930**, L16 (2022)
80. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. IV. Variability, Morphology, and Black Hole Mass*”, [The Astrophysical Journal](#), **930**, L15 (2022)
- 79.** Event Horizon Telescope Collaboration, **Akiyama, K. (One of Three Corresponding Authors)**, Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. III. Imaging of the Galactic Center Supermassive Black Hole*”, [The Astrophysical Journal](#), **930**, L14 (2022)
78. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. II. EHT and Multiwavelength Observations, Data Processing, and Calibration*”, [The Astrophysical Journal](#), **930**, L13 (2022)
77. Event Horizon Telescope Collaboration, Akiyama, K., Alberdi, A., Alef, W., et al., “*First Sagittarius A* Event Horizon Telescope Results. I. The Shadow of the Supermassive Black Hole in the Center of the Milky Way*”, [The Astrophysical Journal](#), **930**, L12 (2022)
76. Cho, I., Zhao, G.-Y., Kawashima, T., Kino, M., Akiyama, K., et al., “*The Intrinsic Structure of Sagittarius A* at 1.3 cm and 7 mm*”, [The Astrophysical Journal](#), **926**, 108 (2022)
75. Satapathy, K., Psaltis, D., Özel, F., Medeiros, L., Dougall, S. T., Chan, C.-K., Wielgus, M., Prather, B. S., Wong, G. N., Gammie, C. F., Akiyama, K., et al., “*The Variability of the Black Hole Image in M87 at the Dynamical Timescale*”, [The Astrophysical Journal](#), **925**, 13 (2022)
74. Cui, Y.-Z., Hada, K., Kino, M., et al., “*East Asian VLBI Network observations of active galactic nuclei jets: imaging with KaVA+Tianma+Nanshan*”, [Research in Astronomy and Astrophysics](#), **21**, 205 (2021)
73. Tsunetoe, Y., Mineshige, S., Ohsuga, K., Kawashima, T., & Akiyama, K., “*Polarization images of accretion flow around supermassive black holes: Imprints of toroidal field structure*”, [Publications of the Astronomical Society of Japan](#), **73**, 912 (2021)
72. Janssen, M., Falcke, H., Kadler, M., Ros, E., Wielgus, M., Akiyama, K., et al., “*Event Horizon Telescope observations of the jet launching and collimation in Centaurus A*”, [Nature Astronomy](#), **5**, 1017 (2021)

71. Issaoun, S., Johnson, M. D., Blackburn, L., Broderick, A., Tiede, P., Wielgus, M., Doeleman, S. S., Falcke, H., Akiyama, K., et al., “*Persistent Non-Gaussian Structure in the Image of Sagittarius A* at 86 GHz*”, [The Astrophysical Journal](#), **915**, 99 (2021)
70. Kocherlakota, P., Rezzolla, L., Falcke, H., Fromm, C. M., Kramer, M., Mizuno, Y., Nathanail, A., Olivares, H., Younsi, Z., Akiyama, K., et al., “*Constraints on black-hole charges with the 2017 EHT observations of M87**”, [Physical Review D](#), **103**, 104047 (2021)
69. Narayan, R., Palumbo, D. C. M., Johnson, M. D., Gelles, Z., Himwich, E., Chang, D. O., Ricarte, A., Dexter, J., Gammie, C. F., Chael, A. A., Event Horizon Telescope Collaboration, Akiyama, K., et al., “*The Polarized Image of a Synchrotron-emitting Ring of Gas Orbiting a Black Hole*”, [The Astrophysical Journal](#), **912**, 35 (2021)
68. EHT MWL Science Working Group, Algaba, J. C., Anczarski, J., Asada, K., Baloković, M., et al., “*Broadband Multi-wavelength Properties of M87 during the 2017 Event Horizon Telescope Campaign*”, [The Astrophysical Journal](#), **911**, L11 (2021)
67. Lo, W.-P., Asada, K., Matsushita, S., Nakamura, M., Pu, H.-Y., Tseng, C., Akiyama, K., et al., “*Constraints on the Mass Accretion Rate onto the Supermassive Black Hole of Cygnus A Using the Submillimeter Array*”, [The Astrophysical Journal](#), **911**, 35 (2021)
66. Goddi, C., Martí-Vidal, I., Messias, H., et al., “*Polarimetric Properties of Event Horizon Telescope Targets from ALMA*”, [The Astrophysical Journal](#), **910**, L14 (2021)
65. Event Horizon Telescope Collaboration, Akiyama, K., Algaba, J. C., Alberdi, A., et al., “*First M87 Event Horizon Telescope Results. VIII. Magnetic Field Structure near The Event Horizon*”, [The Astrophysical Journal](#), **910**, L13 (2021)
64. Event Horizon Telescope Collaboration, Akiyama, K., Algaba, J. C., Alberdi, A., et al., “*First M87 Event Horizon Telescope Results. VII. Polarization of the Ring*”, [The Astrophysical Journal](#), **910**, L12 (2021)
63. Kawashima, T., Toma, K., Kino, M., Akiyama, K., Nakamura, M., & Moriyama, K., “*A Jet-bases Emission Model of the EHT2017 Image of M87**”, [The Astrophysical Journal](#), **909**, 168 (2021)
62. Psaltis, D., Medeiros, L., Christian, P., Özel, F., Akiyama, K., et al., “*Gravitational Test beyond the First Post-Newtonian Order with the Shadow of the M87 Black Hole*”, [Physical Review Letters](#), **125**, 141104 (2020)
61. Wielgus, M., Akiyama, K., Blackburn, L., et al., “*Monitoring the Morphology of M87* in 2009-2017 with the Event Horizon Telescope*”, [The Astrophysical Journal](#), **901**, 67 (2020)
60. Kim, J.-Y., Krichbaum, T. P., Broderick, A. E., Wielgus, M., Blackburn, L., Gómez, J. L., Johnson, M. D., Bouman, K. L., Chael, A., Akiyama, K., et al., “*Event Horizon Telescope imaging of the archetypal blazar 3C 279 at an extreme 20 microarcsecond resolution*”, [Astronomy and Astrophysics](#), **640**, A69 (2020)
59. Gold, R., Broderick, A. E., Younsi, Z., Fromm, C. M., Gammie, C. F., Mościbrodzka, M., Pu, H.-Y., Bronzwaer, T., Davelaar, J., Dexter, J., Ball, D., Chan, C.-. kwan ., Kawashima, T., Mizuno, Y., Ripperda, B., Akiyama, K., et al., “*Verification of Radiative Transfer Schemes for the EHT*”, [The Astrophysical Journal](#), **897**, 148 (2020)
58. Broderick, A. E., Gold, R., Karami, M., Preciado-López, J. A., Tiede, P., Pu, H.-Y., Akiyama, K., et al., “*THEMIS: A Parameter Estimation Framework for the Event Horizon Telescope*”, [The Astrophysical Journal](#), **897**, 139 (2020)
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- M., Honma, M., & Kawabe, R., “*Super-resolution Imaging of the Protoplanetary Disk HD 142527 Using Sparse Modeling*”, [The Astrophysical Journal](#), 895, 84 (2020)
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Non-refereed White Papers and Review Articles

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Conference Presentations

102. Oral Talk, “The Japanese Vision for the Event Horizon Explorer Mission”, [SPIE Astronomical Telescopes + Instrumentation 2024](#), Kanagawa, Japan, June 16-21, 2024
101. Oral Talk, “The Event Horizon Explorer Mission: Vision and Motivation”, [日本天文学会 2024 年春期年会 \(2024 Annual Spring Meeting of the Astronomical Society of Japan\)](#), University of Tokyo, Tokyo, Japan (remotely participated), March 11-15, 2024
100. Oral Talk, “The Event Horizon Explorer Mission: Overview and the Japanese Vision”, [40 Years Evolution of Radio Interferometry in Japan](#), National Astronomical Observatory of Japan, Tokyo, Japan, February 16-17, 2024
99. **Invited Talk**, “The Event Horizon Explorer Mission: Vision and Motivation”, [Black hole astrophysics with VLBI 2024](#), National Astronomical Observatory of Japan, Tokyo, Japan, February 14-15, 2024
98. **Invited Talk**, “Frontier of Black Hole Imaging with the Event Horizon Telescope”, [映像情報メディア学会メディア工学研究会 2023 \(ITE Technical Group on Media Engineering 2023\)](#), Niigata University, Niigata, Japan, December 15, 2023
97. Oral Talk, “The Event Horizon Explorer Mission: Overview and the Japanese Vision”, [2023 年度 VLBI 懇談会シンポジウム \(Japan VLBI Consortium Annual Symposium 2023\)](#), Niigata University, Niigata, Japan, December 13-15, 2023
96. **Invited Talk**, “北米から日本の VLBI コミュニティに期待するもの” (“What we anticipate for the Japanese VLBI community from North America”), [2023 年度 VLBI 懇談会シンポジウム \(Japan VLBI Consortium Annual Symposium 2023\)](#), Niigata University, Niigata, Japan, December 13-15, 2023
95. Oral Talk, “Multi-frequency Event Horizon Telescope: the Sharpest Color Camera of the Universe”, [URSI GASS 2023](#), Hokkaido, Japan, August 19-26, 2023
94. Oral Talk, “EHTJulia: Julia meets black hole imaging”, [European Astronomical Society Meeting 2023](#), Krakow, Poland, July 10-14, 2023
93. **Plenary Talk**, “Broadening horizons of black hole imaging with the EHT and ngEHT”, [BASP Frontiers Conference 2023](#), Villars-sur-Ollon, Switzerland, February 5-10, 2023
92. **Invited Talk**, “Photographing Black Holes with the Event Horizon Telescope”, RESCUE Summer School 2022, Online, August 17, 2022
91. **Invited Talk**, “Imaging the Galactic Center supermassive black hole Sgr A* with the Event Horizon Telescope”, [Next Generation EHT Collaboration Meeting 2022](#), Granada, Spain, June 22-25, 2022
90. Oral Talk, “Status of SMILI and toward the next-generation standardized imaging tools”, EHT Collaboration Meeting 2022 (closed), Granada, Spain, June 19-22, 2022
89. **Invited Talk**, “Imaging the Galactic Center supermassive black hole Sgr A* with the Event Horizon Telescope”, [American Astronomical Society Meeting 240](#), Pasadena, CA, USA, June 12-16, 2022
88. **Invited Talk**, “Horizon-scale Imaging of Sgr A* with the Event Horizon Telescope”, New England Regional Quasar and AGN Meeting 2022, University of Connecticut, CT, USA, May 26, 2022

87. **Invited Talk**, “Interferometric Imaging Techniques for the Event Horizon Telescope”, [URSI National Radio Science Meeting 2022](#), Boulder, CO, USA (remotely participated), January 4-9, 2022
86. **Plenary Talk**, “Plenary talk for a collaboration project as a lead”, EHT Collaboration Winter Meeting 2021 (closed), Online, December 6-10, 2021
85. **Plenary Talk**, “Plenary talk for a collaboration project as a lead”, EHT Collaboration Summer Meeting 2021 (closed), Online, June 18-25, 2021
84. **Invited Talk**, “Many talks as a session chair”, [KISS Workshop “Beyond Interstellar: Extracting Science from Black Hole Images” \(invitation-only\)](#), Online, March 1-5, 2021
83. **Invited Talk**, “Event Horizon Telescope Next Steps: EHT2020s and Potential Space Extension”, [COSPAR 2021 Scientific Assembly](#), Online, January 28 – February 4, 2021
82. **Invited Talk**, “Plenary talks for collaboration projects as a lead”, EHT Collaboration Meeting 2020 (closed), Online, December 4-14, 2020
81. **Invited Talk**, “Photographing Black Holes with the Event Horizon Telescope: Past, Present, and Future”, [NEROC Fifth Annual Radio Science Symposium \(2020\)](#), Online, November 16-17, 2020
80. **Invited Talk**, “Horizon-scale observations of Black Holes - Proto-era, First images and Future -”, [日本天文学会 2020 年秋期年会 \(2020 Annual Fall Meeting of the Astronomical Society of Japan\)](#), Online, September 8-10, 2020
79. Oral Talk, “Expanding the Event Horizon Telescope into a MEO/GEO-sized Imaging Array”, [Space VLBI 2020 – Science and Technology Futures](#), Charlottesville, VA, USA, January 28-30, 2020
78. **Invited Talk**, “Event Horizon Telescope Next Steps: EHT2020, ngEHT and Space VLBI”, [AGN Jet Workshop 2020](#), Tohoku University, Miyagi, Japan (remotely participated), January 20-22, 2020
77. Poster, “Exploring Regularized Maximum Likelihood Reconstruction for the ngVLA: Stellar Imaging as a Case Study”, [American Astronomical Society Meeting 235](#), Hawaii Convention Center, HI, USA, January 4-8, 2020
76. **Invited Talk**, “First M87 Event Horizon Telescope Results: Horizon-scale Imaging of a Supermassive Black Hole”, [American Astronomical Society Meeting 235](#), Hawaii Convention Center, HI, USA, January 4-8, 2020
75. **Invited Talk**, “Photographing a Black Hole with the Event Horizon Telescope”, BZ77 研究会 (BZ77 Workshop), Nagoya University, Nagoya, Japan, December 7-8, 2019
74. **Plenary Talk**, “Plenary Talk for EHT Imaging WG and Panel/Chair of sessions”, EHT Collaboration Meeting 2019 (closed), Grand Naniiloa Hotel Hilo, HI, USA, , December 2-6, 2019
73. Oral Talk, “Microarcsecond-sized Black Holes”, [KISS Workshop “Beyond Interstellar: Extracting Science from Black Hole Images \(invitation-only\)”](#), Keck Institute for Space Studies, California Institute of Technology, Pasadena, CA, , September 16-20, 2019
72. Oral Talk, “EHT による M87* の観測成果 III: 画像化手法および M87* のファーストイメージ” (“First M87 EHT Results III: First Images of M87** and Imaging Process”), [日本天文学会 2019 年秋期年会 \(2019 Annual Fall Meeting of the Astronomical Society of Japan\)](#), Kumamoto University, Kumamoto, Japan, September 11-13, 2019
71. **Plenary Talk**, “Dynamical Imaging and SMILI”, [Dynamics and Black Hole Imaging](#), Perimeter Institute, Waterloo, Canada, , August 12-23, 2019
70. **Invited Talk**, “First Images of a Black Hole”, [CNF2019 Symposium](#), SURA Headquarter, Washington DC, USA, , Aug 12, 2019

69. **Invited Talk**, “Event Horizon Telescope によるブラックホール撮像”, 天文学におけるデータ科学的方法 (Data Science Algorithms and Techniques in Astronomy), Institute of Statistical Mathematics, Tokyo, Japan, May 27-29, 2019
68. **Invited Talk**, “[Inside the Shadow of the Black Hole](#)”, [GitHub Satellite 2019](#), Berlin, German, May 23, 2019
67. **Invited Talk**, “First M87 EHT Results: Mass of the Central Black Hole and Future prospects”, [BHI Conference 2019](#), Black Hole Initiative at Harvard University, MA, USA, May 20-22, 2019
66. Oral Talk, “First Images of a Black Hole”, [NRAO Postdoc Symposium 2019](#), NRAO Charlottesville, VA, USA, April 11-12, 2019
65. Oral Talk, “Millimeter VLBI observations with ALMA: Overview of the first results”, [East Asia AGN Workshop 2019](#), ASIAA, Taipei, Taiwan, January 21-23, 2019
64. **Invited Talk**, “Millimeter VLBI observations with ALMA: Overview of the first results”, [East Asian ALMA Science Workshop 2018](#), Osaka Prefecture University, Osaka, Japan, December 17-19, 2018
63. **Plenary Talk**, “Plenary Talk for EHT Imaging WG and Panel/Chair of sessions”, EHT 2018 (closed), Radboud University, Nijmegen, Netherland, November 5-9, 2018
62. **Invited Talk**, “Imaging the Supermassive Black Holes with the Event Horizon Telescope”, [IAUS 342: Perseus in Sicily: from black hole to cluster outskirts](#), Noto, Italy, May 14-18, 2018
61. Oral Talk, “New Imaging and Filming Techniques for Radio Interferometry”, [NRAO Postdoc Symposium 2018](#), NRAO Socorro, NM, March 19-21, 2018
60. **Invited Talk**, “スパースモデリングの電波天文学への展開—超解像多次元イメージングから磁場トモグラフィ— (“Applications of Sparse Modeling from Super-resolution Imaging to Faraday Tomography”), 宇宙電波懇談会シンポジウム FY2017 「未来を拓く技術開発とその将来展望」 国立天文台 (Japan Radio Astronomy Forum Symposium FY2017), National Astronomical Observatory of Japan, Tokyo, Japan, March 19-20, 2018
59. **Invited Talk**, “Imaging and Filming Black Holes with the Event Horizon Telescope”, [Dawn of a New Era for Black Hole Jets in Active Galaxies](#), Tohoku University, Japan, , January 25-27, 2018
58. Oral Talk, “Imaging the Black Holes and AGNs with the Event Horizon Telescope”, [East Asia AGN Workshop 2017](#), Kagoshima University, Kagoshima, Japan, December 4-6, 2017
57. Oral Talk, “Imaging and Filming the Supermassive Black Holes with the Event Horizon Telescope”, [Second Annual Radio Science Symposium](#), MIT Haystack Observatory, Westford, MA, November 8, 2017
56. Oral Talk, “Interferometric Imaging with Sparse Modeling”, 第 15 回水沢 VLBI 観測所ユーザーズミーティング (リモート参加) (15th NAOJ Mizusawa VLBI Observatory Users Meeting), NAOJ Mizusawa VLBI Observatory, Iwate, Japan, November 3-4, 2017
55. Oral Talk, “The Global Collimation Profile of the Archetypical Quasar 3C 273”, [When Brandeis met Jansky: astrophysics and beyond](#), Brandeis University, Waltham, MA, June 28, 2017
54. **Invited Talk**, “Imaging the Supermassive Black Holes with the Event Horizon Telescope”, [Black Hole Astrophysics with VLBI: Past, Present, and Future](#), National Astronomical Observatory of Japan, Tokyo, Japan, March 27-29, 2017
53. **Invited Talk**, “Imaging the Supermassive Black Holes with Sparse Modeling”, [Challenges of AGN Jets](#), National Astronomical Observatory of Japan, Tokyo, Japan, January 17 - 20, 2017
52. **Invited Talk**, “EHT Imaging Working Group — Progress and Future Prospects —”, [EHT 2016](#), Cambridge, MA, USA, November 29 - December 2, 2016

51. **Invited Talk**, “Imaging supermassive black holes with the Event Horizon Telescope”, [NEROC Symposium: Radio Science and Related Topics](#), MIT Haystack Observatory, MA, USA, November 4, 2016
50. Oral Talk, “Event Horizon Telescope による電波銀河 M87 のブラックホールシャドウと直線偏光の超解像イメージング” (“Superresolution Imaging of the Black Hole Shadow and Polarized Emission in M87 with the Event Horizon Telescope”), 日本天文学会 2016 年秋期年会 (2016 Annual Fall Meeting of the Astronomical Society of Japan), Ehime University, Ehime, Japan, September 14-16, 2016
49. **Invited Talk**, “Interstellar Scintillation and Radio Counterparts of FRBs”, [Boutiques Experiments 2016: Radio \(invitation-only\)](#), Caltech, CA, USA, July 21–23, 2016
48. Oral Talk, “The global structure of the archetypical quasar 3C 273”, [The Twenty-sixth Annual New England Regional Quasar/AGN Meeting](#), Brandeis University, MA, USA, June 9, 2016
47. Oral Talk, “The global structure of the archetypical quasar 3C 273”, [Blazars through Sharp Multi-Wavelength Eyes](#), Malaga, Spain, May 30 - June 3, 2016
46. Oral Talk, “EHT observations during enhanced very-high-energy gamma-ray state in 2012”, [M87 Workshop: Towards the 100th Anniversary of the Discovery of Cosmic Jets](#), Taipei, Taiwan, May 23 - 27, 2016
45. **Invited Talk**, “The jet collimation RM profile in blazars”, [Ultra-high resolution observation with phased ALMA](#), National Astronomical Observatory of Japan, Tokyo, Japan, January 13 - 14, 2016
44. **Invited Talk**, “Sparse Imaging — current status —”, [Ultra-high resolution observation with phased ALMA](#), National Astronomical Observatory of Japan, Tokyo, Japan, January 13 - 14, 2016
43. Poster, “実験・計測グループ天文学班 (A02-3) の進捗報告”, 新学術領域「スパースモデリングの深化と高次元データ駆動科学の創成」第三回領域会議, Keio University, Tokyo, Japan, July 13-15, 2015
42. Oral Talk, “230 GHz (1.3 mm) VLBI observations of M87 with the Event Horizon Telescope”, [KaVA SWG meeting 8th East Asia VLBI workshop](#), Hokkaido University, Hokkaido, Japan, July 6 - 10, 2015
41. **Invited Talk**, “Some future prospects for SPART - EHT observations”, ミニワークショップ「ミリ波 VLBI による、ブラックホール天文学の野望と展望」(Mini Workshop: Prospects for Black Hole Astronomy with Millimeter VLBI), Toyo University, Tokyo, Japan, July 4, 2015
40. **Invited Talk**, “Imaging EHT data with the sparse modeling”, [mm-VLBI Data Processing Workshop](#), Lorentz Center, Leiden, Netherland, June 8 - 11, 2015
39. **Invited Talk**, “サブミリ波 VLBI とベイズ的手法で探るブラックホール天体の構造”, 天文学と統計手法 (Astronomy and Statistical Methods), National Astronomical Observatory of Japan, Tokyo, Japan, May 29, 2015
38. **Invited Talk**, “Event Horizon Telescope で探る M87 の事象の地平面の構造”, 「第 26 回ブラックホール地平面勉強会」研究会 (26th Black Hole Space Time Workshop), ISAS/JAXA, Kanagawa, Japan, April 11, 2015
37. Oral Talk, “EHT で探る M87 の超巨大ブラックホール最近傍の構造 II”, 日本天文学会 2015 年春期年会 (2015 Annual Spring Meeting of the Astronomical Society of Japan), Osaka University, Tokyo, Japan, March 18-21, 2015
36. **Invited Talk**, “Event-horizon-scale structure of M87 in the middle of the VHE enhancement in 2012”, [EHT 2014](#), Perimeter Institute, Waterloo, Canada, , November 10 - 14, 2014
35. Oral talk, “New observations of M87 with the Event Horizon Telescope in March 2012”, [Understanding Relativistic Jets by Polarimetry and Synergetic Study from Radio to TeV](#), Hiroshima University, Hiroshima, Japan, March 24 - 26, 2014

34. Oral Talk, “Event Horizon Telescope (230 GHz VLBI) で探る巨大電波銀河 M87 の TeV 線活動期間中における超巨大ブラックホール最近傍の構造”, 日本天文学会 2014 年春期年会 (2014 Annual Spring Meeting of the Astronomical Society of Japan), International Christian University, Tokyo, Japan, March 19-22, 2014
33. Oral Talk, “東アジア VLBI 観測網で探る銀河系中心のブラックホールへのガス降着現象”, 日本天文学会 2014 年春期年会 (2014 Annual Spring Meeting of the Astronomical Society of Japan), International Christian University, Tokyo, Japan, March 19-22, 2014
32. Oral Talk, “Probing the gas cloud encounter to Sgr A* with VERA/KaVA: current results and future prospect”, [6th KaVA Joint Science Working Group Meeting](#), Kagoshima University, Kagoshima, Japan, January 20-21, 2014
31. Oral Talk, “Data analysis report of 1 Gbps data correlated with KJCC”, [6th KaVA Joint Science Working Group Meeting](#), Kagoshima University, Kagoshima, Japan, January 20-21, 2014
30. Oral Talk, “東アジア VLBI 観測網で探る銀河系中心のブラックホールへのガス降着現象”, 2013 年度 VLBI 懇談会シンポジウム (Japan VLBI Consortium Annual Symposium 2013), Tsukuba University, Ibaraki, Japan, December 23-26, 2013
29. Oral Talk, “Long-term monitoring of Sgr A* at 43 GHz (7 mm) with VERA and KVN+VERA (KaVA)”, [The Galactic Center Black Hole Laboratory](#), Granada, Spain, November 19 - 22, 2013
28. Oral Talk, “VERA and KaVA (KVN+VERA) observations of Sgr A* in 2013”, 第 11 回水沢 VLBI 観測所ユーザーズミーティング (11th NAOJ Mizusawa VLBI Observatory Users Meeting), National Astronomical Observatory of Japan, Tokyo, Japan, October 2-3, 2013
27. Oral Talk, “Long-term monitoring of Sgr A* at 43 GHz (7 mm) with VERA and KVN+VERA (KaVA)”, [IAU 303 The Galactic Center: Feeding and Feedback in a Normal Galactic Nucleus](#), Santa Fe, NM, USA, September 30 - October 4, 2013
26. Oral Talk, “How should we look at the “dinner of the galactic supermassive blackhole Sgr A* with facilities in East Asia?”, 北海道大学-山口大学合同研究会 (Hokkaido University - Yamaguchi University Workshop), Yamaguchi University, Yamaguchi, Japan, March 14-15, 2013
25. Oral Talk, “1.3 mm VLBI observations of 3C 279 and NRAO 530 with Event Horizon Telescope”, 2012 年度 VLBI 懇談会シンポジウム (Japan VLBI Consortium Annual Symposium 2012), NICT, Tokyo, Japan, December 17-20, 2012
24. **Invited Talk**, “Microarcsecond structures of FSRQs NRAO 530 and 3C 279 revealed by EHT observations”, [East-Asian sub-mm VLBI workshop](#), National Astronomical Observatory of Japan, Japan, December 12, 2012
23. Poster, “Microarcsecond structures of FSRQs NRAO 530 and 3C 279 revealed by EHT observations”, [New Trends in Radio Astronomy in the ALMA Era](#), Kanagawa, Japan, December 3 - 6, 2012
22. Oral Talk, “Microarcsecond structures of FSRQs 3C 279 and NRAO 530 revealed by Event Horizon Telescope observations”, [East Asia To Italy: Nearly Global VLBI](#), Bologna, Italy, October 15 - 16, 2012
21. Oral Talk, “A Review on recent scientific results of Event Horizon Telescope (1.3 mm VLBI) observations”, 第 10 回水沢 VLBI 観測所ユーザーズミーティング (10th NAOJ Mizusawa VLBI Observatory Users Meeting), National Astronomical Observatory of Japan, Tokyo, Japan, October 4, 2012
20. **Invited Talk**, “ミリ・サブミリ波 VLBI による活動銀河核の研究”, Large Aperture Millimeter/Submillimeter Telescopes in the ALMA era, National Astronomical Observatory of Japan, Tokyo, Japan, September 29, 2012

19. Oral Talk, “Event Horizon Telescope を用いた 1.3 mm (230 GHz) VLBI によるブレーザー 3C 279 のファースト・モデルイメージ”, 日本天文学会 2012 年秋期年会 (2012 Annual Fall Meeting of the Astronomical Society of Japan), Ohita University, Ohita, Japan, September 19-21, 2012
18. Oral Talk, “Event Horizon Telescope で探るブレーザー NRAO 530 の線フレア後の 1.3 mm (230 GHz) におけるサブパーセクスケールの構造”, 日本天文学会 2012 年秋期年会 (2012 Annual Fall Meeting of the Astronomical Society of Japan), Ohita University, Ohita, Japan, September 19-21, 2012
17. Poster, “GENJI プログラム: 3C 454.3 の 2010 年 11 月の γ 線フレア後の電波帯での多周波ライトカーブ”, 日本天文学会 2012 年秋期年会 (2012 Annual Fall Meeting of the Astronomical Society of Japan), Ohita University, Ohita, Japan, September 19-21, 2012
16. Oral Talk, “Event Horizon Telescope で探る FSRQ3C 279/NRAO 530 の μ as スケールの構造”, VLBI workshop 「巨大ブラックホールからの噴出流」 (VLBI Workshop: Jets from Supermassive Black Holes), National Astronomical Observatory of Japan, Tokyo, Japan, September 6, 2012
15. Oral Talk, “The results of multi-epoch VERA observations of Sgr A* and future prospect for KVN+VERA”, [1st KaVA Joint Science Working Group Meeting](#), National Astronomical Observatory of Japan, Tokyo, Japan, June 13 - 14, 2012
14. **Invited Talk**, “Multi-epoch VERA observations of Sgr A*”, Galactic center mini workshop 2012 at Mitaka, National Astronomical Observatory of Japan, Tokyo, Japan, May 11, 2012
13. Poster, “GENJI プログラム: NRAO 530 と 3C 454.3 のモニター観測結果”, 第 9 回水沢 VLBI 観測所ユーザーズミーティング (9th NAOJ Mizusawa VLBI Observatory Users Meeting), National Astronomical Observatory of Japan, Tokyo, Japan, September 28-29, 2011
12. Oral Talk, “VERA 43GHz による Sgr A* のモニター観測結果”, 第 9 回水沢 VLBI 観測所ユーザーズミーティング (9th NAOJ Mizusawa VLBI Observatory Users Meeting), National Astronomical Observatory of Japan, Tokyo, Japan, September 28-29, 2011
11. Oral Talk, “VERA 43 GHz による銀河系中心核 Sgr A* のモニター観測”, AGN-JET WORKSHOP 2011 - 多波長放射で探る活動銀河中心核ジェット (AGN-Jet Workshop 2011: Multi-wavelength views of AGN Jets), National Astronomical Observatory of Japan, Tokyo, Japan, September 28-29, 2011
10. Oral Talk, “GENJI プログラム: NRAO 530 と 3C 454.3 のモニター観測結果”, 日本天文学会 2011 年秋期年会 (2011 Annual Fall Meeting of the Astronomical Society of Japan), Kagoshima University, Kagoshima, Japan, September 19-22, 2011
9. Oral Talk, “VERA 43 GHz による銀河系中心核 Sgr A* の構造変動 II”, 日本天文学会 2011 年秋期年会 (2011 Annual Fall Meeting of the Astronomical Society of Japan), Kagoshima University, Kagoshima, Japan, September 19-22, 2011
8. Poster, “GENJI プログラム: VERA を用いた高頻度活動銀河核ジェットモニター観測”, 第 11 回高宇連研究会 (11th Meeting of the High Energy Astrophysics Association in Japan), Waseda University, Tokyo, Japan, August 9-11, 2011
7. Oral Talk, “VERA 43 GHz による銀河系中心核 Sgr A* のモニター観測”, 第 11 回高宇連研究会 (11th Meeting of the High Energy Astrophysics Association in Japan), Waseda University, Tokyo, Japan, August 9-11, 2011
6. Poster, “GENJI プログラム: VERA を用いた高頻度活動銀河核ジェットモニター観測”, 29th NRO Users Meeting, NAOJ Nobeyama Radio Observatory, Nagoya, Japan, July 27-28, 2011
5. Poster, “Multi-Epoch VERA Observations of Sagittarius A*”, 29th NRO Users Meeting, NAOJ Nobeyama Radio Observatory, Nagoya, Japan, July 27-28, 2011

4. Oral Talk, “43 GHz による Sgr A*の観測結果と将来計画”, 銀河中心 Sgr A*の観測的ブラックホール時空研究 (Observational Studies of the Black Hole Spacetime around the Galactic Center Sgr A*), University of Tokyo, Tokyo, Japan, March 7-9, 2011
3. Poster, “Multi-epoch VERA observations of Sgr A*”, [East Asia Interferometry Winter School](#), National Astronomical Observatory of Japan, Tokyo, Japan, February 7 - 11, 2011
2. Poster, “Multi-epoch VERA observations of Sgr A*”, Towards a root of AGN jets: Recent progress, National Astronomical Observatory of Japan, Tokyo, Japan, December 14 - 15, 2010
1. Poster, “Multi-epoch VERA observations of Sgr A*”, 2011 年度 VLBI 懇談会シンポジウム (Japan VLBI Consortium Annual Symposium 2011), Ibaraki University, Ibaraki, Japan, December 1-3, 2010

Seminar/Colloquium Talks at Other Institutions

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| 2023 December | National Astronomical Observatory of Japan, Tokyo, Japan
Yamaguchi University, Yamaguchi, Japan
Tokyo Institute of Technology, Tokyo, Japan |
| 2021 January | Large Submillimeter Telescope Seminar Series (online) |
| 2022 December | Heriot-Watt University Edinburgh, Edinburgh, UK (online) |
| 2021 November | From Cells to Galaxies 2021 Speaker Series (Recording), MA, USA (online) |
| 2021 September | South-Western Institute for Astronomy Research, China (online)
Missouri University of Science and Technology, MO, USA (online)
Smithsonian Astrophysical Observatory, MA, USA |
| 2021 April | University of Massachusetts Amherst, MA, USA (online) |
| 2019 June | Thomas Jefferson National Accelerator Facility, VA, USA |
| 2019 May | National Astronomical Observatory of Japan, Tokyo, Japan
Tohoku University, Miyagi, Japan
Kyoto University, Kyoto, Japan
Nagoya University, Nagoya, Japan
Brandeis University, MA, USA |
| 2019 April | National Radio Astronomy Observatory, VA, USA |
| 2018 September | Black Hole Initiative at Harvard University, MA USA |
| 2018 May | The Istituto di Radioastronomia di Bologna, Bologna, Italy
Radboud University, Nijmegen, Netherland |
| 2018 March | Boston University, MA, USA |
| 2018 February | University of Massachusetts Lowell, MA, USA |
| 2016 September | National Astronomical Observatory of Japan, Tokyo, Japan |
| 2015 August | Academia Sinica Institute of Astronomy and Astrophysics, Taipei, Taiwan |
| 2015 June | Kyoto University, Kyoto, Japan |

2015 May Institute of Astronomy, University of Tokyo, Japan

2014 January Academia Sinica Institute of Astronomy and Astrophysics, Taiwan

2013 December The Instituto di Radioastronomia di Bologna, Italy

2013 November Radboud University, Netherland

Graduate School of Arts and Sciences, The University of Tokyo, Japan

Kyoto University, Japan

2013 October Harvard-Smithsonian Center for Astrophysics, USA

2012 November The Instituto di Radioastronomia di Bologna, Italy

2011 August Hokkaido University, Japan

Public Talks and Lectures

2022 October High School Lecture, Portland Schools, Portland, ME, USA

2022 July Undergraduate Lecture, University of California Los Angeles, CA, USA

2022 May Public Talk, Fernbank Science Center and the Cherry Memorial Planetarium, Atlanta, GA, USA

2022 May Presenter in a National Science Foundation's video for the first EHT Sagittarius A* Results ([Youtube](#)), the National Science Foundation

2022 May Panel of the public Q&A session ([Youtube](#)) at [the Press Conference for the groundbreaking results from the EHT Collaboration](#) hosted by the National Science Foundation, Washington DC, USA

2022 February Public Talk, St. Louis Astronomical Society, St. Louis, MO, USA

2021 March Public Lecture, Arlington Community Education, Arlington, MA, USA

2020 November Panel, Back to the Moon: Forum of US-Japan Alliance in a New Space Age, Harvard Smithsonian Center for Astrophysics, Cambridge, MA, USA

2019 June Public Lecture, Boston Japanese Research Forum, Massachusetts Institute of Technology, MA, USA

2019 June High School Lecture, Azabu High and Junior-high Schools, Tokyo, Japan

2019 May Presenter of the Keynote Talk ([Youtube](#)), GitHub Satellite 2019, Berlin, Germany

2019 May Public Talk, Sendai Astronomical Observatory, Miyagi, Japan

2019 April Panel of "Photographing a Black Hole: First results from the Event Horizon Telescope", Harvard University, MA, USA

2015 June Visiting Lecturer, Natsuda Junior High School, Iwate, Japan