

## 9. Publications and Presentations

### Papers (in refereed Journals, April 2020–March 2021)

- Abe, K., Y. Chen, K. Hiraide, K. Ichimura, S. Imaizumi, N. Kato, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata et al. (**Y. Itow, K. Kanzawa**), Search for exotic neutrino-electron interactions using solar neutrinos in XMASS-I. *Phys. Lett. B*, **80**, 135741, Oct. 10, 2010 (10.1016/j.physletb.2020.135741).
- Abe, K., Y. Chen, K. Hiraide, K. Ichimura, S. Imaizumi, N. Kato, Y. Kishimoto, K. Kobayashi, M. Kobayashi, S. Moriyama et al. (**R. Ishii, Y. Itow, K. Kanzawa, K. Masuda**), Development of low-background photomultiplier tubes for liquid xenon detectors. *J. Instrum.*, **15(9)**, P09027, Sep. 18, 2020 (10.1088/1748-0221/15/09/P09027).
- Abe, K., C. Bronner, Y. Haga, Y. Hayato, M. Ikeda, S. Imaizumi, H. Ito, K. Iyogi, J. Kameda, Y. Kataoka et al. (**Y. Itow, H. Menjo, G. Mitsuka, M. Murase, F. Muto, T. Niwa, K. Sato, T. Suzuki, M. Taani, M. Tsukada**), Indirect search for dark matter from the Galactic Center and halo with the Super-Kamiokande detector. *Phys. Rev. D*, **102(7)**, 072002, Oct. 9, 2020 (10.1103/PhysRevD.102.072002).
- Abe, K., C. Bronner, Y. Hayato, M. Ikeda, S. Imaizumi, H. Ito, J. Kameda, Y. Kataoka, M. Miura, S. Moriyama et al. (**Y. Itow, H. Menjo, T. Niwa, K. Sato, M. Tsukada**), Neutron-antineutron oscillation search using a 0.37 megaton-years exposure of Super-Kamiokande. *Phys. Rev. D*, **103(1)**, 012008, Jan. 21, 2021 (10.1103/PhysRevD.103.012008).
- Abe, K., Y. Chen, K. Hiraide, K. Ichimura, S. Imaizumi, N. Kato, K. Kobayashi, M. Kobayashi, S. Moriyama, M. Nakahata et al. (**Y. Itow, K. Kanzawa, K. Masuda**), Search for event bursts in XMASS-I associated with gravitational-wave events. *Astropart. Phys.*, in press (10.1016/j.astropartphys.2021.102568).
- Acharyya, A., R. Adam, C. Adams, I. Agudo, A. Aguirre-Santaella, R. Alfaro, J. Alfaro, C. Alispach, R. Aloisio, R. Alves Batista et al. (**A. Okumura**), Sensitivity of the Cherenkov Telescope Array to a dark matter signal from the Galactic centre. *J. Cosmol. Astropart. Phys.*, **2021(01)**, 57, Jan. 2021 (10.1088/1475-7516/2021/01/057).
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### Books (April 2020–March 2021)

- Hiyama T.**, D. Yang, and D. L. Kane, Permafrost Hydrology: Linkages and Feedbacks. 471–491, in *Arctic Hydrology, Permafrost and Ecosystems*, edited by D. Yang, and D. L. Kane, 914pp, Springer, Cham, Switzerland, Aug. 29, 2020 (10.1007/978-3-030-50930-9\_16).
- Kummerow, C. D., S. Tanelli, **N. Takahashi**, K. Furukawa, M. Klein, and V. Levizzan, Plans for Future Missions. 99–119, in *Satellite Precipitation Measurement: vol. 1 (Advances in Global Change Research, vol. 67)*, edited by V. Levizzani, C. Kidd, D. Kirschbaum, C. Kummerow, K. Nakamura, and F. Turk, 521pp, Springer, Cham, Switzerland, Apr. 11, 2020 (10.1007/978-3-030-24568-9\_6).

Two more books were published in Japanese.

### Publication of Proceedings (April 2020–March 2021)

Title	Date of Publication
The Nagoya University bulletin of chronological research Vol. 4	Jun. 19, 2020
The 25th Symposium on Atmospheric Chemistry: Book of Abstracts	Nov. 2020
The Nagoya University bulletin of chronological research Vol. 5	Mar. 31, 2021

## Conference Presentations (April 2020–March 2021)

### ■ International Conferences

\* Session Conveners

Title	Venue	Date	Orga- nizers	Number of Presentations			
				Staffs and PDs	Students	Total	Invited
EGU General Assembly 2020	Online	May 4–8, 2020	0	3	0	3	0
JpGU – AGU Joint Meeting 2020 – Virtual	Online	Jul.12–16, 2020	1 9*	56	31	87	8
Goldschmidt Virtual 2020	Online	Jul. 21–26, 2020	0	0	1	1	0
IBS and KMI Joint Workshop 2020	Online	Aug. 24–26, 2020	0	1	0	1	0
Technology for Next Generation Space-Earth Environmental Radio Science	Online	Aug. 24–26, 2020	1	4	0	4	2
Convection-Permitting Modeling for Climate Research Current and Future Challenges	Online	Sep. 2–4, 2020	0	1	0	1	1
XI International Conference “Solar-Terrestrial Relations and Physics of Earthquakes Precursors”	Paratunka, Russia/ Online	Sep. 22–25, 2020	1	1	0	1	0
International Symposium on Data Science 2020	Online	Sep. 23–25, 2020	1	0	0	0	0
4th Workshop of WESTPAC WG06: A framework for cooperative studies in the Western Pacific Marginal Seas: Energy and materials exchange between land and open ocean	Online	Oct. 6–7, 2020	0	1	0	1	0
NASA PMM Science team meeting	Online	Oct. 19–23, 2020	0	1	0	1	0
CHAMOS workshop 2020	Online	Oct. 20–22, 2020	0	1	0	1	0
4th Asia-Pacific Conference on Plasma Physics	Online	Oct. 26–31, 2020	0	2	1	3	1
The 29th International Toki Conference on Plasma and Fusion Research	Online	Oct. 27–30, 2020	0	2	0	2	1
UJI Reconnection Workshop (URW) 2020	Online	Nov. 5, 2020	0	2	0	2	1
Kashiwa Dark Matter symposium 2020	Online	Nov. 16–19, 2020	1	0	0	0	0
The 9th VERSIM Workshop	Online	Nov. 16–20, 2020	5	9	1	10	2
The 11th Symposium on Polar Science	Online	Nov. 16–Dec.18, 2020	0	6	3	9	0
The 21st EA Sub-mm-wave Receiver Technology Workshop	Online	Nov. 24–25, 2020	0	1	0	1	0
AGU Fall Meeting	Online	Dec. 1–17, 2020	0	19	11	30	0
The extreme Universe viewed in very-high-energy gamma rays 2020	Online	Dec. 3–4, 2020	1	0	0	0	0
YITP workshop “Connecting high-energy astroparticle physics for origins of cosmic rays and future perspectives”	Kyoto, Japan/Online	Dec. 7–10, 2020	1	0	1	1	0
Approaches for Hydrospheric-Atmospheric Environmental Studies in Asia-Oceania	Online	Dec. 17–18, 2020	1	1	0	1	0
The 8th Asian/17th Korea-Japan Workshop on Ocean Color 2020	Online	Dec. 21–23, 2020	0	1	3	4	0
2nd Workshop for Atmospheric Neutrino Production in the MeV to PeV range	Online	Jan.12–13, 2021	3	1	0	1	0
43rd COSPAR Scientific Assembly	Online	Jan. 28–Feb. 4, 2021	0	10	1	11	6

Title	Venue	Date	Organizers	Number of Presentations			
				Staffs and PDs	Students	Total	Invited
New perspective of inner heliosphere studies ~ Toward Solar Cycle 25 ~	Online	Feb. 15–16, 2021	1	1	0	1	1
ISEE International Joint Research Program “Modeling the transport and deposition of cosmogenic isotopes of historical MIYAKE Events and recent decades”	Online	Mar. 2–3, 2021	0	1	0	1	0
International conference and school on dynamic variation of particles and waves in the inner magnetosphere and ionosphere using satellite and ground-network observations and modeling (PWING-ERG conference and school)	Online	Mar. 8–12, 2021	2	7	0	7	2
The 44th annual apatity seminar, Physics of Auroral Phenomena	Online	Mar. 15–19, 2021	0	3	0	3	1
1st Workshop for Interplay of Neutrino and Dark matter Experiments and Exotics Searches (INDEES 2021)	Online	Mar. 18–19, 2021	1	2	0	2	2
Total			20 9*	137	53	190	28

### ■ Domestic Conferences

\* Session Conveners

Number of Conferences	Organizers	Number of Presentations			
		Staffs and PDs	Students	Total	Invited
52	33 8*	151	67	217	5

### ■ Lectures for Researchers

Date	Title	Number of Participants
May 26, 2020 Jul. 20, 2020 Sep. 10, 2020 Nov. 17, 2020 Jan. 14, 2021 Jan. 19, 2021	SCOSTEP/PRESTO Online Seminar (1st–6th)	83 168 19 96 100 65
Jan. 22, 2021 Mar. 5, 2021 Mar. 29, 2021	SCOSTEP Online Capacity Building Lecture (1st–3rd)	40 47 50
Feb. 3, 2021	CICR colloquium	27
Mar. 8, 2021 Mar. 9, 2021	PWING school on the inner magnetosphere and data analysis tool	100

## Awards

### ■ Staffs and PDs

Award Winners	Date	Awards	Title
Yuichi Otsuka	Apr. 2020	Advances in Space Research Top Reviewer 2019	One of the 10 Top Reviewers in 2019 by the journal "Advances in Space Research"
Shoya Matsuda	Aug. 3, 2020	The 2019 Earth, Planets and Space (EPS) Young Researcher Award	Matsuda et al., Onboard software of Plasma Wave Experiment aboard Arase: instrument management and signal processing of Waveform Capture/Onboard Frequency Analyzer. <i>Earth Planets Space</i> , 70, 75, 10.1186/s40623-018-0838-0a, 2018
Fumio Abe (F.A. Masaomi Tanaka)	Sep. 9, 2020	PASJ Excellent Paper Award	Tanaka et al., Kilonova from post-merger ejecta as an optical and near-Infrared counterpart of GW170817. <i>Publications of the Astronomical Society of Japan</i> , 69(6), 102, 10.1093/pasj/psx121, 2017
Kazumasa Iwai	Nov. 3, 2020	Obayashi Early Career Scientist Award, SGEPPS	Studies on solar atmosphere and heliosphere based on the development of leading-edge radio telescopes
Masafumi Hirahara (F.A. Satoshi Kasahara)	Nov. 3, 2020	SGEPSS Outstanding Paper Award	Medium-energy particle experiments-electron analyzer (MEP-e) for the exploration of energization and radiation in geospace (ERG) mission, <i>Earth, Planets and Space</i> , 70, 69, 10.1186/s40623-018-0847-z, 2018
Yuichi Otsuka	Jan. 2021	Excellent Reviewer 2020, Earth Planets and Space	Important contribution as a reviewer of Earth Planets and Space
Yoshizumi Miyoshi	Feb. 4, 2021	Inoue Prize for Science	Study on accelerations and scattering of the energetic electrons in Geospace as an elementary process of space weather

Additionally, one domestic award

### ■ Students

Award Winners	Date	Awards	Title
Hiroki Ito	May 28, 2020	Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS) Student Presentation Award (Aurora Medal)	Flux decrease of outer radiation belt electrons associated with solar wind pressure pulse: A code coupling simulation
Yudai Inaba			First plasma and field observations in the magnetospheric source region of Stable Auroral Red (SAR) arc by the Arase satellite
Yuichiro Asakura (F.A. Masaomi Tanaka)	Sep. 9, 2020	PASJ Excellent Paper Award	Tanaka et al., Kilonova from post-merger ejecta as an optical and near-Infrared counterpart of GW170817. <i>Publications of the Astronomical Society of Japan</i> , 69(6), 102, 10.1093/pasj/psx121, 2017
Yudai Inaba	Feb. 21, 2021	Outstanding Student Presentation Award (OSPA), AGU Fall Meeting 2020	Multi-event analysis of plasma and field variations in the source of Stable Auroral Red (SAR) arcs in the inner magnetosphere during non-storm time substorms

Additionally, two domestic awards