

## 理論研究部 欧文査読付き論文リスト

2014/H26年度 平成26年(2014年)4月1日から平成27年(2015年)3月31日までに出版・発表されたもの

注 ※1 当該組織の研究者が主筆的に作成した論文や実際に講演を行った発表等には「\*」

※2 著者に台内の若手研究者が含まれる論文には分ける範囲で「\*」

※3 著者に台内の女性研究者が含まれている論文には分ける範囲で「\*」

※4 著者に外国機関に所属している研究者が含まれている論文には分ける範囲で「\*」

※1	※2	※3	※4	著者	出版年	論文名	雑誌名	巻	ページもしくはID	DOI
	*			Akiyama, E., Muto T., Kusakabe, N., Kataoka, A., et al.:	2015	Discovery of a Disk Gap Candidate at 20 AU in TW Hydrae	ApJL	802	17	<a href="https://doi.org/10.1088/2041-8205/802/2/L17">10.1088/2041-8205/802/2/L17</a>
	*			Aota, T., Inoue, T., Aikawa, Y.:	2015	Evaporation of Grain-surface Species by Shock Waves in a Protoplanetary Disk	ApJ	799	141	10.1088/0004-637X/799/2/141
			*	Brasser, R., Ida, S., Kokubo, E.:	2104	A dynamical study on the habitability of terrestrial exoplanets - II. The super Earth HD 40307 g	MNRAS	440	3685-3700	10.1093/mnras/stu555
				Cheoun, M. K., K. S. Kim, H. Kim, W. Y. So, T. Maruyama, and Kajino, T.:	2015	In-medium effect on the muon-neutrino and anti-muon-neutrino quasi-elastic scattering off a nucleon in 12C.	J. Phys.	G42	045102 (14pp)	10.1088/0954-3899/42/4/045102
	*			Chiaki, G., Marassi, S., Nozawa, T., Yoshida, N., Schneider, R., Omukai, K., Limongi, M., Chieffi, A.:	2015	Supernova Dust Formation and the Grain Growth in the Early Universe: The Critical Metallicity for Low-mass Star Formation	MNRAS	446	2659-2672	10.1093/mnras/stu2298
			*	Dober, B. J., Ade, P. A. R., Ashton, P., Angilè, F. E., Nakamura, F. 他 34名	2014	The next-generation BLASTPol experiment	SPIE	9153	91530H	<a href="https://doi.org/10.1117/12.2054419">10.1117/12.2054419</a>
			*	Dober, Bradley J., Ade, Peter A. R., Ashton, Peter, Angilè, Francesco E., Beall, James A., Becker, Dan, Bradford, Kristi J., Che, George; Cho, Hsiao-Mei, Devlin, Mark J.; and 29 coauthors (Nakamura, F.)	2014	The next-generation BLASTPol experiment	SPIE	9153	91530H	<a href="https://doi.org/10.1117/12.2054419">10.1117/12.2054419</a>
*				Famiano, M. A., Boyd, R. N., Kajino, T., Onaka, T., Koehler K., and Hulbert, S.:	2014	Determining Amino Acid Chirality in the Supernova Neutrino Processing Model.	Symmetry 6		909-925	10.3390/sym6040909
	*			Folatelli, G., Bersten, M. C., Benvenuto, O. G., van Dyk, S. D., Kuncarayakti, H., Maeda, K., Nozawa, T., Nomoto, K., Hamuy, M., Quimby, R. M.	2014	A Blue Point Source at the Location of Supernova 2011dh	ApJ	793	L22 (5pp)	10.1088/2041-8205/793/2/L22
*	*			Fujimoto, K.:	2014	Wave activities in separatrix regions of magnetic reconnection	Geophys. Res. Lett.	41	2721-2728	10.1002/2014GL059893
	*		*	Giles, P. A.; Maughan, B. J.; Hamana, T.; Miyazaki, S.; Birkinshaw, M.; Ellis, R. S.; Massey, R.:	2015	The X-ray properties of weak-lensing-selected galaxy clusters	MNRAS	447	3044-3059	10.1093/mnras/stu2679
				Hanawa, T., and Tomisaka, K.:	2015	Structure and Stability of Filamentary Clouds Supported by Lateral Magnetic Field	ApJ	801	11 (11pp)	10.1088/0004-637X/801/1/11
	*			Hashizume, K., Ohsuga, K., Kawashima, T., Tanaka, M.:	2014	Radiation hydrodynamics simulations of wide-angle outflows from super-critical accretion disks around black holes	PASJ		10.1093/pasj/psu132	
	*		*	Hesse, M., Aunai, N., Kuznetsova, M., Zenitani, S., Birn, J.:	2015	Magnetic Reconnection in Different Environments: Similarities and Differences	AGU Geophysical Monograph	207	259	
	*		*	Hesse, M., Aunai, N., Birn, J., Cassak, P., Denton, R., Drake, J. F., Gombosi, T., Hoshino, M., Matthaeus, W., Sibek, D., Zenitani, S.:	2014	Theory and Modeling for the Magnetospheric MultiScale Mission	Space Science Reviews			10.1007/s11214-014-0078-y
	*		*	Hirashita, H., Asano, R. S., Nozawa, T., Li, Z.-Y., Liu, M.-C.:	2014	Dense Molecular Cloud Cores as a Source of Micrometer-Sized Grains in Galaxies	Planet. Space Sci.	100	40-45	10.1016/j.pss.2014.01.013
	*		*	Horiuchi, S., Nakamura, K., Takiwaki, T., Kotake, K., Tanaka M.:	2014	The red supergiant and supernova rate problems: implications for core-collapse supernova physics	Monthly Notices of the Royal Astronomical Society	445	L99	10.1093/mnras/stu146
*			*	Kajino, T., Tokuhiisa, A., Mathews, G. J., Yoshida, T. and Famiano, M. A.:	2014	Ultra High-Energy Neutrinos via Heavy-Meson Synchrotron Emission in Strong Magnetic Fields.	Astrophys. J.	782	70	10.1088/0004-637X/782/2/70
*				Kajino, T., Mathews, G. J., and Hayakawa, T.:	2014	Neutrinos in Core-Collapse Supernovae and Nucleosynthesis.	J. Phys. G41,044007,			10.1088/0954-3899/41/4/044007
	*	*	*	Kameno, S., Mizuno, I., Nakamura, F., Kuroo, M., Kano, A., Kawaguchi, N., Shibata, K. M., Kuno, N., Takano, S., Kuji, S.:	2014	The software-based polarization spectrometer PolarIS	SPIE	9153	91532D	<a href="https://doi.org/10.1117/12.2055205">10.1117/12.2055205</a>
*	*			Kataoka, A., Okuzumi, S., Tanaka, H., Nomura, H.:	2014	Opacity of fluffy dust aggregates	A&A	568	A42	<a href="https://doi.org/10.1051/0004-6361/201323199">10.1051/0004-6361/201323199</a>
	*			Kawabata, K. S., Akitaya, H., Yamanaka, M., Itoh, R., Maeda, K., Moritani, Y., Uji, T., Kawabata, M., Mori, K., Nogami, D., Nomoto, K., Suzuki, N., Takaki, K., Tanaka, M., Ueno, I., Chiyonobu, S., Harao, R., Matsui, R., Miyamoto, H., Nagae, O., Nakashima, A., Nakaya, H., Ohashi, Y., Ohsugi, T., Komatsu, T., Sakimoto, K., Sasada, M., Sato, H., Tanaka, H., Urano, T., Yamashita, T., Yoshida, M., Arai, A., Ebisuda, E., Fukazawa, Y., Fukui, A., Hashimoto, O., Honda, S., Izumiura, H., Kanda, Y., Kawaguchi, K., Kawai, N., Kuroda, D., Masumoto, K., Matsumoto, K., Nakaoka, T., Takata, K., Uemura, M., Yanagisawa, K.:	2014	Optical and Near-infrared Polarimetry of Highly Reddened Type Ia Supernova 2014J: Peculiar Properties of Dust in M82	The Astrophysical Journal	795	L4	10.1088/2041-8205/795/1/L4
			*	Komatsubara, T., S. Kubono, T. Hayakawa, T. Moriguchi, Y. Ito, H. Ooishi, Y. Ishibashi, K. Hara, Y., Ozawa, A., Shizuma, T., Hayakawa, S., Yamaguchi, H., Bihn, D. N., Kahl, D., Chen, A. A., Chen, J., Nakamura, K., and Kajino, T.	2014	Excited states above the proton threshold in 26Al.	The European Physical Journal	A50	136	10.1140/epja/i2014-14136-4

			*	Krumholz, M. R., Bate, M. R., Arce, H. G., Dale, J. E., Gutermuth, R., Klein, R. I., Li, Z.-Y., Nakamura, F., Zhang, Q.:	2014	Star Cluster Formation and Feedback	Protostars and Planets VI		p.243-266	<a href="https://doi.org/10.2458/azu_uapress_9780816531240-ch011">10.2458/azu_uapress_9780816531240-ch011</a>
*	*		*	Kudo, T., Basu, S.:	2014	Induced Core Formation Time in Subcritical Magnetic Clouds by Large-scale Trans-Alfvénic Flows	ApJ	794	127	
			*	Kusakabe, K., Kim, K. S., Cheoun, K., Kajino, T., Kino, Y., and Mathews, G. J.:	2014	Revised Big Bang Nucleosynthesis with long-lived negatively charged massive particles: Impact of new 6Li limit, primordial 9Be nucleosynthesis, and updated recombination rates.	Astrophys. J. Suppl	215	5	10.1088/0067-0049/214/1/5
*			*	Marassi, S., Chiaki, G., Schneider, R., Limongi, M., Omukai, K., Nozawa, T., Chieffi, A., Yoshida, N.:	2014	The Origin of the Most Iron-poor Star	ApJ	794	100	10.1088/0004-637X/794/2/100
			*	Maruyama, T., J. Hidaka, T. Kajino, N. Yasutake, T. Kuroda, M.-K. Cheoun, C.-Y. Ryu, and G. J. Mathews,		Rapid Spin Deceleration of Magnetized Proto-Neutron Stars with Asymmetric Neutrino Emission.	Phys. Rev.	C89	035801	10.1103/PhysRevC.89.035801
			*	Maruyama, T., Hidaka, J., Kajino, T., Yasutake, N., Kuroda, T., Cheoun, M.-K., Ryu, C.-Y., and Mathews, G. J.	2014	Asymmetric Neutrino Production in Strongly Magnetized Proto-Neutron Stars.	Phys. Rev.	D90 (2014)	067302	10.1103/PhysRevD.90.067302
*			*	Mathews, G. J., Hidaka, J., T. Kajino, and Suzuki, J.	2014	Supernova Relic Neutrinos and the Supernova Rate Problem: Analysis of Uncertainties and the role of Failed Supernovae.	Astrophys. J.	790	115	10.1088/0004-637X/790/2/115
*	*	*	*	Matsunaga, Noriyuki; Fukue, Kei; Yamamoto, Ryo; Kobayashi, Naoto; Inno, Laura; Genovali, Katia; Bono, Giuseppe; Baba, Junichi; Fujii, Michiko S.; Kondo, Sohei; Ikeda, Yuji; Hamano, Satoshi; Nishiyama, Shogo; Nagata, Tetsuya; Aoki, Wako; Tsujimoto, Takuji	2014	Kinematics of Classical Cepheids in the Nuclear Stellar Disk	ApJ	799	id. 46	10.1088/0004-637X/799/1/46
*			*	Mazzali, P. A., McFadyen, A. I., Woosley, S. E., Pian, E., Tanaka, M.:	2014	An upper limit to the energy of gamma-ray bursts indicates that GRBs/SNe are powered by magnetars	Monthly Notices of the Royal Astronomical Society	443	67	10.1093/mnras/stu1124
*			*	Melandri, A., Pian, E., D'Elia, V., D'Avanzo, P., Della Valle, M., Mazzali, P. A., Tagliaferri, G., Cano, Z., Leván, A. J., Moller, P., Amati, L., Bernardini, M. G., Bersier, D., Bufano, F., Campana, S., Castro-Tirado, A. J., Covino, S., Ghirlanda, G., Hurley, K., Malesani, D., Masetti, N., Palazzi, E., Piranomonte, S., Rossi, A., Salvaterra, R., Starling, R. L. C., Tanaka, M., Tanvir, N. R., Vergani, S. D.:	2014	Diversity of gamma-ray burst energetics vs. supernova homogeneity: SN 2013cq associated with GRB 130427A	Astronomy and Astrophysics	567	A29	10.1051/0004-6361/201423572
*				Michikoshi, S., Kokubo, E.:	2014	Pitch Angle of Galactic Spiral Arms	ApJ	787	174(7pp)	10.1088/0004-637X/787/2/174
*			*	Morokuma, T., Tominaga, N., Tanaka, M., Mori, K., Matsumoto, E., Kikuchi, Y., Shibata, T., Sako, S., Aoki, T., Doi, M., Kobayashi, N., Maehara, H., Matsunaga, N., Mito, H., Miyata, T., Nakada, Y., Soyano, T., Tarusawa, K., Miyazaki, S., Nakata, F., Okada, N., Sarugaku, Y., Richmond, M. W., Akitaya, H., Aldering, G., Arimatsu, K., Contreras, C., Horiuchi, T., Hsiao, E. Y., Itoh, R., Iwata, I., Kawabata, K. S., Kawai, N., Kitagawa, Y., Kokubo, M., Kuroda, D., Mazzali, P. A., Misawa, T., Moritani, Y., Morrell, N., Okamoto, R., Pavlyuk, N., Phillips, M. M., Pian, E., Sahu, D., Saito, Y., Sano, K., Stritzinger, M. D., Tachibana, Y., Taddia, F., Takaki, K., Tateuchi, K., Tomita, A., Tsvetkov, D., Uji, T., Ukita, N., Urata, Y., Walker, E. S., Yoshii, T.:	2014	Kiso Supernova Survey (KISS): Survey strategy	Publications of the Astronomical Society of Japan	66	114	10.1093/pasj/psu105
*				Nagai, T., Shinohara, I., Zenitani, S.:	2015	Ion acceleration processes in magnetic reconnection: Geotail observations in the magnetotail	Journal of Geophysical Research	120	1766	10.1002/2014JA020737
*	*	*	*	Nakamura, F., Sugitani, K., Tanaka, T., Nishitani, H., Dobashi, K., Shimoikura, T., Shimajiri, Y., Kawabe, R., Yonekura, Y., Mizuno, I., 他17名	2014	Cluster Formation Triggered by Filament Collisions in Serpens South	ApJL	791	23	<a href="https://doi.org/10.1088/2041-8205/791/2/L23">10.1088/2041-8205/791/2/L23</a>
*	*			Nozawa, T., Yoon, S.-C., Maeda, K., Kozasa, T., Nomoto, K., Langer, N.:	2014	Dust Production Factories in the Early Universe: Formation of Carbon Grains in Red-supergiant Winds of Very Massive Population III Stars	ApJ	787	L17 (5pp)	10.1088/2041-8205/787/2/L17
*	*			Nozawa, T., Asano, R. S., Hirashita, H., Takeuchi, T. T.	2015	Evolution of Grain Size Distribution in High-redshift Dusty Quasars: Integrating Large Amounts of Dust and Unusual Extinction Curves	MNRAS	447	L16-L20	10.1093/mnras/slu175
*			*	Ohashi, N., Saigo, K., Aso, Y., Aikawa, Y., Koyamatsu, S., Mahcida, M.N., Saito, M., Takahashi, S.Z., Takakuwa, S., Tomida, K., Tomisaka, K., J., and Yen, H.-W.	2014	Formation of a Keplerian Disk in the Infalling Envelope around L1527 IRS: Rransformation from Infalling Motions to Kepler Motions	ApJ	796	131(11pp)	10.1088/0004-637X/796/2/131
*			*	Okabe, N., Umetsu, K., Tamura, T., Fujita, Y., Takizawa, M., Zhang, Y.-Y., Matsushita, K., Hamana, T., Fukazawa, Y., Futamase, T., Kawaharada, M., Miyazaki, S., Mochizuki, Y., Nakazawa, K., Ohashi, T., Ota, N., Sasaki, T., Sato, K., Tam, S.	2014	Universal profiles of the intracluster medium from Suzaku X-ray and Subaru weak-lensing observations	PASJ	66	id. 99 14pp	10.1093/pasj/psu075
			*	Pehlivan, Y., Balantekin, A. B., and Kajino, T.	2014	Neutrino Magnetic Moment, CP Violation and Flavor Oscillations in Matter.	Phys. Rev.	D90	065011	10.1103/PhysRevD.90.065011
*			*	Pétri, J., Takamoto, M., Baty, H., Zenitani, S.	2015	Explosive reconnection of double tearing modes in relativistic plasmas with application to the Crab nebula	Plasma Physics and Controlled Fusion	57	259	10.1088/0741-3335/57/1/014034
			*	Raymond, S. N., Kokubo, E., Morbidelli, A., Morishima, R., Walsh, K. J.	2014	Terrestrial Planet Formation at Home and Abroad	Protostar and Planets VI		595-618	<a href="https://doi.org/10.2458/azu_uapress_9780816531240-ch026">10.2458/azu_uapress_9780816531240-ch026</a>

*	*	*	Sano, H., Fukuda, T., Yoshiike, S., Sato, J., Horachi, H., Kuwahara, T., Torii, K., Hayakawa, T., Tanaka, T., Matsumoto, H., <b>Inoue, T.</b> , Yamazaki, R., Inutsuka, S., Kawamura, A., Yamamoto, H., Okuda, T., Tachihara, K., Mizuno, N., Onishi, T., Mizuno, A., Acero, F., Fukui, Y.	2015	A Detailed Study of Non-thermal X-ray Properties and Interstellar Gas Toward the $\gamma$ -ray Supernova Remnant RX J1713.7-3946	ApJ	799	175	10.1088/0004-637X/799/2/175
*	*	*	Shibata, S., Tominaga, N., <b>Tanaka, M.:</b>	2014	Random Walks and Effective Optical Depth in Relativistic Flow	The Astrophysical Journal	787	L4	10.1088/2041-8205/787/1/L4
*	*	*	Shimajiri, Y., Kitamura, Y., Saito, M., Momose, M., <b>Nakamura, F.</b> 他9名	2014	High abundance ratio of $^{13}\text{CO}$ to $\text{C}^{18}\text{O}$ toward photon-dominated regions in the Orion-A giant molecular cloud	A&A	564	68	10.1051/0004-6361/201322912
*	*	*	Shimajiri, Y., Kitamura, Y., <b>Nakamura, F.</b> , Momose, M., Saito, M., Tsukagoshi, T., Hiramatsu, M., Shimoikura, T., Dobashi, K., Hara, C., Kawabe, R.	2014	Catalog of Dense Cores in the Orion A Giant Molecular Cloud	ApJS	217	7	10.1088/0067-0049/217/1/7
*	*	*	Silva, H. O., <b>Sotani, H.</b> , Berti, E., Horbatsch, M.:	2014	Torsional oscillations of neutron stars in scalar-tensor theory of gravity	Phys. Rev. D	90	124044.	10.1103/PhysRevD.90.124044
*	*	*	<b>Sotani, H.</b> , Miyamoto, U.:	2014	Properties of an electrically charged black hole in Eddington-inspired Born-Infeld gravity	Phys. Rev. D	90	124087.	10.1103/PhysRevD.90.124087
*	*	*	<b>Sotani, H.</b> , Iida, K., Oyamatsu, K.:	2015	Constraining the density dependence of the nuclear symmetry energy from an X-ray bursting neutron star	Phys. Rev. C	91	015805.	10.1103/PhysRevC.91.015805
*	*	*	<b>Sotani, H.</b> , Tatsumi, T.:	2015	Massive hybrid quark stars with strong magnetic field	MNRAS	447	3155-3161.	10.1093/mnras/stu2677
*	*	*	Suzuki, A., <b>Takahashi, H. R.</b> , <b>Kudoh, T.:</b>	2014	Linear Growth of the Kelvin-Helmholtz instability with an Adiabatic Cosmic-Ray Gas	ApJ	787	169	
*	*	*	Takahashi, H. R.; <b>Ohsuga, K.:</b>	2015	Radiation drag effects in black hole outflows from super-critical accretion disks via special relativistic radiation magnetohydrodynamics simulations	PASJ		10.1093/pasj/psu145	
*	*	*	Takami, H., <b>Nozawa, T.</b> , Ioka, K.:	2014	Dust Formation in Macronovae	ApJ	789	L6 (5pp)	10.1088/2041-8205/789/1/L6
*	*	*	Takeuchi, S., <b>Ohsuga, K.</b> , Mineshige, S.:	2014	Radiation hydrodynamic instability in a plane-parallel, super-Eddington atmosphere: A mechanism for clump formation	PASJ	66	10.1093/pasj/psu011	
*	*	*	<b>Tanaka, M.</b> , Morokuma, T., Itoh, R., Akitaya, H., Tominaga, N., Saito, Y., Stawarz, L., Tanaka, Y. T., Gandhi, P., Ali, G., Aoki, T., Contreras, C., Doi, M., Essam, A., Hamed, G., Hsiao, E. Y., <b>Iwata, I.</b> , Kawabata, K. S., Kawai, N., Kikuchi, Y., Kobayashi, K., <b>Kuroda, D.</b> , Maehara, H., Matsumoto, E., Mazzali, P. A., Minezaki, T., Mito, H., Miyata, T., <b>Miyazaki, S.</b> , Mori, K., Moritani, Y., <b>Morokuma-Matsui, K.</b> , Morrell, N., Nagao, T., Nakada, Y., <b>Nakata, F.</b> , Noma, C., <b>Ohsuga, K.</b> , <b>Okada, N.</b> , Phillips, M. M., Pian, E., Richmond, M. W., Sahu, D., Sako, S., Sarugaku, Y., Shibata, T., Soyano, T., Stritzinger, M. D., Tachibana, T., Taddia, F., Takaki, K., Takey, A., Tarusawa, K., Ue, T., <b>Ukita, N.</b> , Urata, U., Walker, E. S., Yoshii T.:	2014	Discovery of Dramatic Optical Variability in SDSS J1100+4421: A Peculiar Radio-loud Narrow-line Seyfert 1 Galaxy?	ApJ	793	L26	10.1088/2041-8205/793/2/L26
*	*	*	<b>Tomisaka, K.:</b>	2014	Structure and Mass of Filamentary Isothermal Cloud Threaded by Lateral Magnetic Field	ApJ	785	24 (12pp)	10.1088/0004-637X/785/1/24
*	*	*	Utsumi, Y., <b>Miyazaki, S.</b> , Geller, Margaret J.; Dell'Antonio, Ian P.; Oguri, M., Kurtz, Michael J.; <b>Hamana, T.</b> , Fabricant, Daniel G.:	2014	Reducing Systematic Error in Weak Lensing Cluster Surveys	ApJ	786	article id. 93, 22 pp	10.1088/0004-637X/786/2/93
*	*	*	Wang, L., Sato, B., Omiya, M., Harakawa, H., Liu, Y., Song, N., He, W., Wu, X., <b>Izumiura, H.</b> , <b>Kambe, E.</b> , <b>Takeda, Y.</b> , Yoshida, M., Itoh, Y., <b>Ando, H.</b> , <b>Kokubo, E.</b> , Ida, S., Zhao, G.:	2014	A long-period eccentric substellar companion to the evolved intermediate-mass star HD 14067	PASJ	66	118(9pp)	10.1093/pasj/psu113
*	*	*	Warren, M. L., M.Meixner, Mathews, G. J., Hidaka, J., and <b>Kajino, T.:</b>	2014	Sterile neutrino oscillations in core-collapse supernova simulations.	Phys. Rev.	D90	103007	10.1103/PhysRevD.90.103007
*	*	*	Yamazaki, D. G., Kusakabe, M., <b>Kajino, T.</b> , Mathews, G. J., and Cheoun, M.-K.:	2014	Cosmological solutions to the Lithium Problem: Big-Bang Nucleosynthesis with Photon Cooling, X-particle Decay and a Primordial Magnetic Field.	Phys. Rev.	D90	023001	10.1103/PhysRevD.90.023001
*	*	*	Yen, H.-W. Yen, Takakuwa, S., <b>Ohashi, N.</b> , Aikawa, Y., <b>Aso, Y.</b> , <b>Koyamatsu, S.</b> , Machida, M.N., <b>Saigo, K.</b> , <b>Saito, M.</b> , Tomida, K., and <b>Tomisaka, K.:</b>	2014	ALMA Observations of Infalling Flows toward the Keplerian Disk around the Class I Protostar L1489 IRS 2014	ApJ	793	1(20p)	10.1088/0004-637X/793/1/1
*	*	*	<b>Zenitani S.:</b>	2015	Magnetohydrodynamic structure of a plasmoid in fast reconnection in low-beta plasmas: Shock-shock interactions	Physics of Plasmas	22	032114	10.1063/1.4916104