

## 1 欧文論文(査読あり)

対象: 平成20年4月から平成21年3月まで 2008年4月～2009年3月

※1 「\*」… 理論研究部所属の研究者が主導的に作成した論文

※1	著者(※2)	出版年	論文名	雑誌名(※3)	巻	ページ
1	Akutsu, T., Kawamura, S., Nishizawa, A., Arai, K., Yamamoto, K., Tatsumi, D., Nagano, S., Nishida, E., Chiba, T., Takahashi, R., Sugiyama, N., Nagano, S., Nishida, E., Chiba, T., Takahashi, R., Sugiyama, N.,	2008	"Search for a Stochastic Background of 100-MHz Gravitational Waves with Laser Interferometers",	PhRvL	101	101101
2	S.Amano, K.Horikawa, K.Ishihara, S.Miyamoto, T.Hayakawa, T.Shizuma, T.Mochizuki,	2009	Several-MeV Gamma-ray generation at NewSUBARU by laser Compton backscattering,	Nucl. Instrum. Method, Phys. Res. A,	602	337-341
3	Ando, M. Kawamura, S. Nakamura, T. Tsubono, K. Tanaka, T. Funaki, I. Seto, N. Numata, K. Sato, S. Ioka, K. Kanda, N. Takashima, T. Agatsuma, K. Akutsu, T. Akutsu, T. Aoyanagi, K. Arai, K. Arase, Y. Araya, A. Asada, H. Aso, Y. Chiba, T. Ebisuzaki, T. Enoki, M. Eriguchi, Y. Fujimoto, M. Fujita, R. Fukushima, M. Futamase, T. Ganza, K. Harada, T. Hashimoto, T. Hayama, K. Hikida, W. Himmelot, Y. Hirabayashi, H. Hiramatsu, T. Hong, F. Horisawa, F. Hosokawa, M. Ichiki, K. Ikegami, T. Inoue, K.T. Ishidohiro, K. Ishihara, H. Ishikawa, T. Ishizaki, H.	2008	DECIGO Pathfinder	Journal of Physics: Conference Series	120	32005
4	Antolin, P., Shibata, K., <b>Kudoh, T.</b> , Shiota, D., Brooks, D.	2008	Predicting Observational Signatures of Coronal Heating by Alfvén Waves and Nanoflares	ApJ	688	669
5	Y. Aso et al.	2008	Search method for coincident events from LIGO and IceCube detectors	Classical and Quantum Gravity	25	114039
6	Baek, C.H., <b>Kudoh, T.</b> , Tomisaka, K.	2008	How was the Mushroom-shaped GW 123.4–1.5 Formed in the Galactic Disk?	ApJ	682	434-444
7	Bekki, K., Yahagi, H., <b>Nagashima, M.</b> , Forbes, D. A.	2008	The origin of globular cluster systems from cosmological simulations	MNRAS	387	1131
8	Buat, V. Boissier, S. Burgarella, D. Takeuchi, T. T., Le Floch, E..., Marcillac, D., Huang, J., <b>Nagashima, M.</b> , Enoki, M.	2008	Star formation history of galaxies from $z = 0$ to $z = 0.7$ . A backward approach to the evolution of star-forming galaxies	A&A	483	107
9	S. Chiba, H. Koura, T. Hayakawa, T. Maruyama, T. Kawano and <b>T. Kajino</b>	2008	Direct and semi-direct capture in low energy ( $n, \gamma$ ) reactions of neutron-rich Tin isotopes and its implications for the r-process nucleosynthesis.	Phys. Rev	C77	15809
10	Daisuke Namekata, Asao Habe, Hidenori Matsui, & Takayuki. R. Saitoh	2008	Mass Supply to Galactic Center due to Nested Bars in the Galaxy	ApJ	691	1525
11	M. Famiano, R. Boyd, and <b>T. Kajino</b>	2008	$^{138}\text{La}$ - $^{138}\text{Ce}$ - $^{136}\text{Ce}$ nuclear cosmochronometer of supernova neutrino process.	J. Phys.	G35	252203
12	<b>Fujii, M.</b> , <b>Iwasawa, M.</b> , Funato, Y., Makino, J.	2008	Evolution of Star Clusters near the Galactic Center: Fully Self-consistent N-body Simulations	ApJ	686	1082-1093
13	Groen, D., Portegies Zwart, S., McMillan, S., Makino, J.	2008	Distributed N-body simulation on the grid using dedicated hardware	New Astronomy	13	348-358
14	R. Hajima, <b>T. Hayakawa</b> , N. Kikuzawa, E. Minehara,	2008	Proposal of Nondestructive Assay Using a High-Flux Gamma-Ray Source and Nuclear Resonance Fluorescence,	J. Nucl. Sci. Tech.	45	441-451
15	* Hamana, T. Miyazaki, S.	2008	Note on Artificial Deformation in Object Shapes Due to Pixelization	PASJ	60	1363
16	T. Hashimoto, H. Ishiyama, Y. X. Watanabe, Y. Hirayama, N. Imai, H. Miyatake, S. C. Jeong, M.-H. Tanaka, N. Yoshikawa, T. Nomura, S. Mitsuoka, K. Nishi, T. K. Sato, A. Osa, S. Ichikawa, M. Matsuda, H.	2009	A new measurement of the astrophysical $^{8}\text{Li}(d,t)^{7}\text{Li}$ reaction.	Phys. Lett.	B674	276-280,
17	<b>T. Hayakawa</b> , T. Shizuma, T. Kajino, K. Ogawa, and H. Nakada,	2008	$^{138}\text{La}$ - $^{138}\text{Ce}$ - $^{136}\text{Ce}$ nuclear cosmochronometer of supernova neutrino process.	Phys. Rev	C77	65802
18	<b>T. Hayakawa</b> , T. Shizuma, S. Miyamoto, S. Amano, K. Kawase, K. Horikawa, K. Ishihara, S. Chiba, M.	2008	Half-life of $^{164}\text{Ho}$ isomer populated by (g,n) reaction from Laser Compton scattering g-rays at NewSUBARU.	Phys. Rev.	C77	68801
19	T. Hayakawa, N. Iwamoto, <b>T. Kajino</b> , T. Shizuma, H. Umeda, and K.-I. Nomoto,	2008	Empirical Abundance Scaling Laws and Implications for the Gamma Process in Core-Collapse Supernovae	Astrophys. J.	685	1089-1102
20	T. Hayakawa, T. Shizuma, <b>T. Kajino</b> , K. Ogawa, and H. Nakada,		Reply to "Comment on $^{138}\text{La}$ - $^{138}\text{Ce}$ - $^{136}\text{Ce}$ nuclear cosmochronometer of supernova neutrino process"	Phys. Rev	C79	59802
21	K. Hayama et al.	2008	Determination of the angular momentum distribution of supernovae from gravitational wave observations	Classical and Quantum Gravity	25	184022
22	* <b>Hosokawa, T. &amp; Omukai, K.</b>	2009	Evolution of Massive Protostars with High Accretion Rates	ApJ	691	823
23	T. Hosokawa, & K. Omukai	2009	Evolution of Massive Protostars with High Accretion Rates	ApJ	691	823-846
24	* Inoue, T., & Inutsuka, S.	2008	Two-fluid MHD Simulations of Converging HI Flows in the Interstellar Medium. I: Methodology and Basic Results	ApJ	687	303
25	* Inoue, T., Yamazaki, R., & Inutsuka, S.	2009	Turbulence and Magnetic Field Amplification in Supernova Remnants: Interactions Between A Strong Shock Wave and Multi-Phase Interstellar Medium	ApJ	695	825

26	*	Ishiyama, T., Fukushige, T., Makino, J.	2008	Environmental Effect on the Subhalo Abundance – a Solution to the Missing Dwarf Problem	PASJ	60	L13
27		Ito, H., Kino, M., Kawakatu, N., Isobe, N., Yamada, S	2008	The Estimate of Kinetic Power of Jets in FR II Radio Galaxies: Existence of Invisible Components?	ApJ	685	828–838
28		Iwakami, W., Kotake, K., Ohnishi, Naofumi; Yamada, Shoichi; Sawada, Keisuke	2008	Three-Dimensional Simulations of Standing Accretion Shock Instability in Core-Collapse Supernovae	ApJ	678	1207–1222
29	*	Kawakatu, N., Wada, K.	2008	Coevolution of Supermassive Black Holes and Circumnuclear Disks	ApJ	681	73–83
30	*	Kawakatu, N., Hiroshi N., Kino M.	2008	The Fate of Young Radio Galaxies: Decelerations Inside Host Galaxies?	ApJ	687	141–155
31	*	Kawakatu, N., Nagao, T., Woo, Jong-Hak	2009	Exploring the Disk-Jet Connection from the Properties of Narrow-Line Regions in Powerful Young Radio-Loud Active Galactic Nuclei	ApJ	693	1686–1695
32		Kawamura, S. et al.	2008	"The Japanese space gravitational wave antenna – DECIGO"	JPhCS	122	12006
33		Kawamura, S., et al.	2008	The Japanese space gravitational wave antenna; DECIGO"	JPhCS	120	32004
34		K.Kawase, M.Kando, T.Hayakawa, I.Daito, S.Kondo, T.Homma, T.Kameshima, H.Kotaki, L.-M.Chen, Y.Fukuda	2008	Sub-MeV tunably polarized X-ray production with laser Thomson backscattering,	Review of Scientific Instruments, .	79	3302
35		N.Kikuzawa, R.Hajima, N.Nishimori, E.Minehara, T.Hayakawa, T.Shizuma, H.Toyokawa, H.Ohgaki,	2009	Nondestructive Detection of Heavily Shielded Materials by Using Nuclear Resonance Fluorescence with a Laser-Compton Scattering Gamma-ray Source,	Applied Physics Express, 2,	36502	1–3
36		Kino, M., Ito, H., Kawakatu, N., Nagai, H.	2009	New prediction of extragalactic GeV $\gamma$ -ray emission from radio lobes of young AGN jets	MNRAS	395	43–47
37		Kiuchi, K & Kotake, K	2008	Equilibrium Configurations of Strongly Magnetized Neutron Stars with Realistic Equations of State	MNRAS	385	1327–1347
38	*	K. Kojima, K. Ichiki, D. G. Yamazaki, T. Kajino, G. J. Mathews	2008	Neutrino mass effects on vector and tensor CMB anisotropies in the presence of a primordial magnetic field	Physical Review D	78	45010
39		Kotake, K., Suwa, Y., Yasutake, N.	2008	Gravitational waves from core-collapse supernovae and their related compact objects	EAS Publications Series	30	95
40		Kotake, K., Kiuchi, K., Yasutake, N.	2008	Gravitational Radiation and Equations of State of Super-dense Cores of Supernovae	Exotic Stars of Nuclear matter	1	160
41		Koyama, H., Nagashima, M., Kakehata, T., Yoshii, Y.	2008	Dynamical response to supernova-induced gas removal in spiral galaxies with dark matter halo	MNRAS	389	237
42	*	Kudoh, T., Basu, S.	2008	Three-dimensional Simulation of Magnetized Cloud Fragmentation Induced by Nonlinear Flows and Ambipolar Diffusion	ApJ	679	L97
43		Kusakabe, M., Kajino, T., Boyd, R. N., Yoshida, T., Mathews, G. J.	2008	The X' Solution to the $^6\text{Li}$ and $^7\text{Li}$ Big Bang Nucleosynthesis Problems	ApJ	680	846–857
44		Lapi, A., Kawakatu, N., Bosnjak, Z., Celotti, A., Bressan, A., Granato, G. L., Danese, L.	2008	Long gamma-ray bursts and their host galaxies at high redshift	ApJ	386	608–618
45		M. N. Machida, K. Omukai, T. Matsumoto	2008	Conditions for the Formation of First-Star Binaries	ApJ	677	813–827
46		Machida, M. N., *Kokubo, E., Inutsuka, S., Matsumoto, T.	2008	Angular Momentum Accretion onto a Gas Giant Planet	ApJ	685	1220–1236
47		Machida, M. N., Tomisaka, K., Matsumoto, T., and Inutsuka, S.-i.	2008	Formation Scenario for Wide and Close Binary Systems	ApJ	677	327–347
48		Maciejewski, A., Przybylska, M., Yoshida, H.	2008	Necessary conditions for super-integrability of Hamiltonian systems	Physics Letters A	372	5581–5587
49		Nishizawa, A., Kawamura, S., Akutsu, T., Arai, K., Yamamoto, K., Tatsumi, D., Nishida, E., Sakagami, M.-a.	2008	"Optimal location of two laser-interferometric detectors for gravitational wave backgrounds at 100 MHz"	CQGra	25	225011
50		Nishizawa, A. J., Komatsu, E., Yoshida, N., Takahashi, R., and Sugiyama, N.	2008	"Cosmic Microwave Background-Weak Lensing Correlation: Analytical and Numerical Study of Nonlinearity and Implications for Dark Energy"	ApJ	676	L93–L96
51		Nitadori, K., Makino, J.	2008	Sixth- and eighth-order Hermite integrator for N-body simulations, New Astronomy	New Astronomy	13	498–507
52		Noda, T., Yasutake, N., Hashimoto, M., Fujimoto, M.	2008	Effects of the transition from neutron stars to quark stars on the cooling	Exotic Stars of Nuclear matter	1	282
53		K. Omukai, R. Schneider, & Z. Haiman	2008	Can Supermassive Black Holes Form in the Metal-Enriched High-redshift	ApJ	686	801–814
54		Ota, K., Iye, M., Kashikawa, N., Shimasaku, K., Kobayashi, M., Totani, T., Nagashima, M.	2008	Reionization and Galaxy Evolution Probed by $z = 7$ Ly $\alpha$ Emitters	ApJ	677	12
55		Portegies Zwart, S., McMillan, S., Harfst, S., Derek, G., Fujii, M., et al.	2009	A multiphysics and multiscale software environment for modeling astrophysical systems	New Astronomy	14	369–378
56		Saitoh, T. R., Daisaka, H., Kokubo, E., Makino, J., Okamoto, T., Tomisaka, K., Wada, K., Yoshida, N.	2008	Toward First-Principle Simulations of Galaxy Formation: I. How Should We Choose Star-Formation Criteria in High-Resolution Simulations of Disk Galaxies?	PASJ	60	667

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58		Sato, B., Toyota, E., Omiya, M., *Izumiura, H., *Kambe, E., *Masuda, S., *Takeda, Y., Itoh, Y., *Ando, H..	2008	Planetary Companions to Evolved Intermediate-Mass Stars: 14 Andromedae, 81 Ceti, 6 Lyncis, and HD167042	PASJ	60	1317–1326
59		Sato, B., Izumiura, H., Toyota, E., Kambe, E., Ikoma, M., Omiya, M., *Masuda, S., *Takeda, Y., Murata, D..	2008	Planetary Companions around Three Intermediate-Mass G and K Giants: 18 Delphini, $\xi$ Aquilae, and HD 81688	PASJ	60	539–550
60	*	<b>Naoki Seto</b>	2008	Non-Gaussianity Test for Discriminating Gravitational Wave Backgrounds around 0.1–1 Hz	ApJL	683	95
61	*	<b>Naoki Seto</b>	2008	Detecting Planets around Compact Binaries with Gravitational Wave Detectors in Space	ApJL	677	55
62	*	<b>Naoki Seto</b> and Atsushi Taruya	2008	Polarization analysis of gravitational-wave backgrounds from the correlation signals of ground-based interferometers: Measuring a circular-polarization mode	Phys.Rev.D	77	103001
63		T.Shizuma, T.Ishii, H.Makii, <b>T.Hayakawa</b> , M.Matsuda, S.Shigematsu, E.Idoguchi, Y.Zheng, M.Tanaka, M.Ochiai	2008	One-quasiparticle bands in neutron-rich 187W,	Phys. Rev.	C 77	47303
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66		Suwa, Y., Takiwaki, T., <b>Kotake, K.</b> , Sato, K	2009	Impact of Rotation on Neutrino Emission and Relic Neutrino Background from Population III Stars.	ApJ	690	913–922
67		Takahashi, K., Ichiki, K., and <b>Sugiyama, N.</b>	–2008	Electromagnetic properties of the early universe"	PhRvD	77	124028
68		Takahashi, R., Yoshida, N., Matsubara, T., <b>Sugiyama, N.</b> , Kayo, I., Nishimichi, T., Shirata, A., Taruya, A.	–2008	"Simulations of baryon acoustic oscillations – I. Growth of large-scale density fluctuations",	MNRAS	389	1675–1682
69		Takiwaki T., <b>Kotake, K.</b> , Sato, K	2009	Special Relativistic Simulations of Magnetically-dominated Jets in Collapsing Massive Stars.	ApJ	691	1360–1379
70		Tashiro, H., Silk, J., Langer, M., and <b>Sugiyama, N.</b>	2009	The Sunyaev-Zel'dovich effect and Faraday rotation contributions of galaxy groups to the CMB angular power spectrum"	MNRAS	392	1421–1428
71		Tashiro, H. and <b>Sugiyama, N.</b>	2008	Constraints on primordial black holes by distortions of the cosmic microwave background",	PhRvD	78	23004
72		Midori Tokutani, Naoki Yoshida, S. Peng Oh, Naoshi Sugiyama	2009	The 21-cm signature of early relic HII regions	MNRAS	395	777–780
73		Ueda, H., <b>Nagashima, M.</b> , Yahagi, H.	2008	Analysis of the Spatial Distribution of Galaxies in the Numerical Galaxy Catalog	PASJ	61	85
74		Ujino, H., Vinet, L., Yajima, T., <b>Yoshida, H.</b>	2008	Additional constants of motion for a discretization of the Calogero-Moser model	J. Physical Society of Japan	77	74001
75	*	<b>Wada, K.</b>	2008	Instabilities of Spiral Shocks. II. A Quasi-Steady State in the Multiphase Inhomogeneous ISM	ApJ	675	188
76		Watabe, Y., <b>Kawakatu, N.</b> , Imanishi, M	2008	Nuclear/Circumnuclear Starbursts and Active Galactic Nuclei Mass Accretion in Seyfert Galaxies	ApJ	677	895–905
77		<b>D. G. Yamazaki</b> , K. Ichiki, T. Kajino, and G. J. Mathews	2008	Effects of a primordial magnetic field on low and high multipoles of the cosmic microwave background.	Phys. Rev.	D77	43005
78		<b>Dai G. Yamazaki</b> , Toshitaka Kajino, Kiyotomo Ichiki, and Grant J. Mathews,	2008	Constraints on the Primordial Magnetic Field from sigma_8.	Phys. Rev	D78	1123001
79	*	<b>Yasutake, N.</b> , Noda, T., Yamada, S., Hashimoto,M. Kotake, K	2008	Effects of QCD Phase Transition on Ejected Elements from the Envelopes of Compact Stars	Physics of Self-Organization Systems	1	219
80	*	<b>Yasutake, N.</b> , Noda, T., Yamada, S., Hashimoto, M., Kotake, K.	2008	Ejected elements from the envelope of compact stars by QCD phase transition	Exotic Stars of Nuclear matter	1	437
81		N. Yoshida, <b>K. Omukai</b> , & L. Hernquist	2008	Protostar Formation in the Early Universe	Science	321	669–671
82	*	<b>Yoshida, T.</b> , Suzuki, T., Chiba, S., Kajino, T., Yokomakura, H., Kimura, K., Takamura, A., Hartmann, D. H.	2008	Neutrino-Nucleus Reaction Cross Sections for Light Element Synthesis in Supernova Explosions	ApJ	686	448–466
83	*	<b>Yasutake, N.</b> , Kashiwa, K	2009	Lepton effects on the proto-neutron stars with the hadron-quark mixed phase in the Nambu-Jona-Lasinio model	Phys. Rev. D	79	43012