

1 英文論文(査読あり)

対象:平成19年4月から平成20年3月まで 2007年4月~2008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	* Asano, K. & Inoue, S.	2007	Prompt GeV–TeV Emission of Gamma–Ray Bursts Due to High–Energy Protons, Muons, and Electron–Positron Pairs	ApJ	671	645–655
2	Baek, C. H., Kudoh, T. and Tomisaka, T.	2008	How Was the Mushroom–Shaped GW 123.4–1.5 Formed in the Galactic Disk?	ApJ	in press	
3	Bekki, K., Yahagi, H., Forbes, D. A.	2007	On the origin of mass?metallicity relations, blue tilts and scaling relations for metal–poor globular cluster systems	MNRAS	377	215–228
4	Bekki, K., Yahagi, H., Nagashima, M., Forbes, D. A.	2007	Formation of the Galactic globular clusters with He–rich stars in low–mass haloes virialized at high redshift	MNRAS	382	L87–L91
5	Chiba, S., Koura, H., Hayakawa, T., Maruyama, T., Kawano, T., and Kajino, T.	2008	Direct and semi–direct capture in low energy (n, γ) reactions of neutron–rich Tin isotopes and its implications for the r –process nucleosynthesis.	Phys. Rev.	C77	15809
6	Famiano, M., Boyd, R., Kajino, T., Otsuki, K., Terasawa, M., and Mathews, G. J.	2008	Shell model calculation of excited beta–decays for r –process nucleosynthesis.	J. Phys.	G35	252203
7	* Fujii, M., Iwasawa, M., Funato, Y., and Makino, J.	2007	BRIDGE: A Direct–tree Hybrid N–body Algorithm for Fully Self–consistent Simulations of Star Clusters and their Parent Galaxies	PASJ	59	
8	Fujita, Y., Suzuki, T., Kudoh, T., Yokoyama, T.	2007	The Origin of Ripples in Cool Cores of Galaxy Clusters: Heating by Magnetohydrodynamic Waves?	ApJ	659	L1–L4
9	Groen, D., S. Portegies Zwart, S. McMillan, and Makino, J.	2008	Distributed N–body simulation on the grid using dedicated hardware	New Astronomy	13	348–358
10	Hamada, K., Horata, S., Sugiyama, N., and Yukawa, T.	2008	Analyzing WMAP Observation by Quantum Gravity	Progress of Theoretical Physics	119	253–262
11	Hatsukawa, Y., Miyamoto, Y., Hayakawa, T., Toh, Y., Kimura, A., Oshima, M.	2008	Measurements of presolar grain in meteorite using neutron activation analysis with multi–parameter coincidence method	JOURNAL OF RADIOANALYTICAL AND	276	213
12	Heggie, D. C., P. Hut, S. Mineshige, J. Makino, and H. Baumgardt	2007	The Core Radius of a Star Cluster Containing a Massive Black Hole	PASJ	59	L11–L14
13	* Higuchi, A., Kokubo, E., Kinoshita, H., Mukai, T.	2007	Orbital Evolution of Planetesimals due to the Galactic Tide: Formation of the Comet Cloud	AJ	134	1693–1706
14	* Hosokawa, T.	2007	Trapping of the HI and Photodissociation Region in a Radially Stratified Molecular Cloud	A&A	463	187–194
15	* Hosokawa, T. and Inutsuka, S.	2007	Dynamical Formation of Dark Molecular Hydrogen Clouds around Diffuse H II Regions	ApJ	667	363–376
16	Hut, P., S. Mineshige, D. C. Heggie, and Makino, J.	2007	Modeling Dense Stellar System	PthP	118	187–209
17	Ichikawa, T.; Suzuki, R*; Tokoku, C*; Uchimoto, Y. K.; Konishi, M.*; Yoshikawa, T*; Kajisawa, M.*; Ouchi, M.; Hamana, T*; Akiyama, M*; Nishimura, T.; Omata, K*; Tanaka, I*; Yamada, T*.	2007	MOIRCS Deep Survey. II. Clustering Properties of K–Band Selected Galaxies in GOODS–North Region	PASJ	59	1081–1094
18	Ichiki, K., Inoue, S., Takahashi, K.	2008	Probing the Nature of the Weakest Intergalactic Magnetic Fields with the High–Energy Emission of Gamma–Ray Bursts	ApJ	in press	
19	Ichiki, K., Takahashi, K., Sugiyama, N., Hanayama, H., and Ohno, H.	2007	Generation of Large–Scale Magnetic Fields from Primordial Density Fluctuations	Modern Physics Letters A	22	2091–2098
20	* Inoue, S., G. Sigl, F. Miniati, E. Armengaud	2007	Ultrahigh Energy Cosmic Rays as Heavy Nuclei from Cluster Accretion Shocks	Phys. Rev. D	in press	
21	* Inoue, S., Omukai, K., Ciardi, B.	2007	The radio to infrared emission of very high redshift gamma–ray bursts: probing early star formation through molecular and atomic absorption lines	MNRAS	380	1715–1728
22	Inoue, T. and Inutsuka, S.	2007	Evolutionary Conditions in Dissipative MHD Systems Revisited	Progress of Theoretical	118,	47–58
23	Inoue, T., & Inutsuka, S.	2008	Two–Fluid MHD Simulations of Converging HI Flows in the Interstellar Medium. I: Methodology and Basic Results	ApJ	in press	(arXiv:0801.0486)
24	Inoue, T., Inutsuka, S., and Koyama, H.	2007	The Role of Ambipolar Diffusion in the Formation Process of Moderately Magnetized Diffuse Clouds	ApJ	658,	L99–L102
25	Itô, H., Kino, M., Kawakatu, N., Isobe, N., Yamada, S.	2007	Large kinetic power in FRII radio jets	Astrophysics and Space Science	311	335–339
26	Itô, T. and Tanikawa, K.	2007	Trends in 20th century celestial mechanics (Review)	Publ. Natl. Astron. Obs.	Vol. 9, No.3 – 4,	1 – 71
27	Kase, H., Makino, J. and Y. Funato	2007	Missing Dwarf Problem in Galaxy Cluster	PASJ	59	1071–1080
28	* Kawakatu, N., Andreani, P., Granato, G.L., Danese, L.	2007	Exploring Supermassive Black Hole Growth with ALMA	ApJ	663	924
29	* Kawakatu, N., Imanishi, M., Nagao, T.	2007	Anti–correlation between the mass of a supermassive black hole and the mass accretion rate in type I ultraluminous infrared galaxies and nearby QSOs	ApJ	661	660
30	* Kawakatu, Nozomu; Wada, Keiichi	2008	Coevolution of Supermassive Black Holes and Circumnuclear Disks	ApJ	681	in press

31	Kawamura, S. et al	2007	The Japanese Space Gravitational Wave Antenna; DECIGO	Journal of Physics: Conference Series, International Conference on Topics in Astroparticle and Underground Physics		
32	Kawamura, S. et al	2007	The Japanese Space Gravitational Wave Antenna –DECIGO	Journal of Physics: Conference Series, 7th Edoardo Amaldi Conference on Gravitational Waves		
33	Kino, M., Kawakatu, N., Ito, H.	2007	Extragalactic MeV γ -ray emission from cocoons of young radio	MNRAS	376	1630
34	Klein, R. I., Inutsuka, S., Padoan, P., & Tomisaka, K.	2007	Current Advances in the Methodology and Computational Simulation of the Formation of Low-Mass Stars	Protostars and Planets V (2007)		
35	* Kobayashi, C. Volker Springel & Simon D. M. White	2007	Simulations of Cosmic Chemical Enrichment	MNRAS	376	1465–1479
36	* Kokubo, E., Ida, S.	2007	Formation of Terrestrial Planets from Protoplanets. II. Statistics of Planetary Spin	ApJ	671	2082–2090
37	* Kudo, T., Tamura, M., Kitamura, Y., Hayashi, M., Kokubo, E., Fukagawa, M., Hayashi, S. S., Ishii, M., Itoh, Y., Mayama, S., Momose, M., Morino, J., Oasa, Y., Pyo, T.-S., and Suto, H.	2008	Discovery of a Scattering Disk around the Low-Mass T Tauri Star FN Tauri	ApJ	673	L67–L70
38	* Kudoh, T., Basu, S., Ogata, Y., Yabe, T.	2007	Three-dimensional simulations of molecular cloud fragmentation regulated by magnetic fields and ambipolar diffusion	MNRAS	380	499–505
39	* Kusakabe, M.	2008	Pregalactic LiBeB Production by Supernova Cosmic Rays	ApJ	accepted	
40	* Kusakabe, M., Kajino, T., and Mathews, G. J.	2007	Possibility of a Signature of the Radiative Decay of Relic Particles on Light Element Abundances.	Mod. Phys. Lett.	A29	2019–2026.
41	Kusakabe, M., Kajino, T., Boyd, R. N., Yoshida, T., Mathews, G. J.	2007	A Simultaneous Solution to the ${}^6\text{Li}$ and ${}^7\text{Li}$ Big Bang Nucleosynthesis Problems from a Long-Lived Negatively Charged Particle	PRD	76	121302
42	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		in press
43	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	MNRAS	409	in press
44	Liu, Y. J., Sato, B., Zhao, G., Noguchi, K., Wang, H., Kambe, E., Ando, H., Izumiura, H., Chen, Y. Q., Okada, N., Toyota, E., Omiya, M., Masuda, S., Takeda, Y., Murata, D., Itoh, Y., Yoshida, M., Kokubo, E., Ida S.	2008	A Substellar Companion to the Intermediate-Mass Giant 11 Com	ApJ	672	553–557
45	Machida, M. N., Inutsuka, S., and Matsumoto, T.	2008	High- and Low-Velocity Magnetized Outflows in the Star Formation Process in a Gravitationally Collapsing Cloud	ApJ	676	1088–1108
46	Machida, M. N., Inutsuka, S., and Matsumoto, T.	2007	Magnetic Fields and Rotations of Protostars	ApJ	670	1198–1213
47	Machida, M. N., Omukai, K., Matsumoto, T., and Inutsuka, S.	2008	Conditions for the Formation of First-Star Binaries	ApJ	677	813–827
48	Machida, M. N., Tomisaka, K., Matsumoto, T., and Inutsuka, S.	2008	Formation Scenario for Wide and Close Binary Systems	ApJ	677	327–347
49	* Mathews, G. J., Ichiki, K., Kajino, T., Lan, N. Q.	2008	Unified Views of Dark Matter and Dark Energy	J. Mod. Phys. A	in press	
50	* Mathews, G. J., Lan, N. Q., Kolda, C.	2008	Late Decaying Dark Matter, Bulk Viscosity, and the Cosmic Acceleration	Phys. Rev.	submitted	
51	* Mathews, G. J., Ichiki, K., Kajino, T., Lan, N. Q., Zhao, X.	2008	Alternative Unified Views on Dark Matter and Dark Energy	J. Mod. Phys. A	submitted	
52	Matsumoto, T., Kitai, R., Shibata, K., Ohtsui, K., Shita, D., Takasaki, H.	2008	Height dependence of the gas flows in an Ellerman bomb	PASJ	accepted	
53	Michikoshi, S., Inutsuka, S., Kokubo, E., and Furuya, I.	2007	N-Body Simulation of Planetesimal Formation through Gravitational Instability of a Dust Layer	ApJ	657	521–532
54	Mikkola, S. and Tanikawa, K.	2007	Correlation of macroscopic instability and Lyapunov times in the general three-body problem	Mon. Not. R. astron. Soc.	Vol.379	L21 – L24
55	Miyazaki, S., Hamana, T., Ellis, R. S., Kashikawa, N., Massey, R. J., Taylor, J., Refregier, A.	2007	A Subaru Weak-Lensing Survey. I. Cluster Candidates and Spectroscopic Verification	ApJ	669	714–728
56	Murase, K., Asano, K. and Nagataki, S.	2007	Effects of Cosmic Infrared Background on High Energy Delayed Gamma-Rays from Gamma-Ray Bursts	ApJ	671	1886
57	Muto, T., Machida, M.N., & Inutsuka, S.	2008	The Effect of Poloidal Magnetic Field on Type I Planetary Migration: Significance of Magnetic Resonance2008.	ApJ	in press	(arXiv:0712.1060)
58	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.
59	Nishizawa, A., Kawamura, S., Akutsu, T., Arai, K., Yamamoto, K., Tatsumi, D., Nishida, E., Sakagami, M.-A., Chiba, T., Takahashi, R., and Sugiyama, N.	2008	Laser-interferometric detectors for gravitational wave backgrounds at 100MHz: Detector design and sensitivity	Physical Review D	77	022002–
60	Nitadori, K. and Makino, J.	2008	Sixth- and eighth-order Hermite integrator for N-body simulations	New Astronomy	13	498–507

61	Oda, H., Mechida, M. , Nakamura, K.E., Matsumoto, R	2007	Steady Models of Optically Thin, Magnetically Supported Black Hole Accretion Disks	PASJ	59	457-465
62	Ohnishi, N., Kotake, K. , Yamada, S	2007	Inelastic Neutrino-Helium Scatterings and Standing Accretion Shock Instability in Core-Collapse Supernovae	ApJ	667	375-381
63	* Omukai, K.	2007	Observational Characteristics of the First Protostellar Cores	PASJ	59	589-606
64	Orito, M., Kajino, T. , Mathews, G. J. , Boyd, R. N.	2008	Neutrino Degeneracy and Decoupling	J. Phys. G	submitted	
65	Orlov, V.V., Petrova, A.V., Tanikawa, K. , Saito, M.M., and Martynova, A.I.	2008	The rectilinear three-body problem	Cel. Mech. & Dynam. Astron	Vol.100	93 - 120
66	Rollinde, E., Maurin, D., Vangioni, E., Olive, K., Inoue, S.	2007	Cosmic Ray Production of Beryllium and Boron at High Redshift	ApJ	in press	
67	Saigo, K. , Tomisaka, K. and Matsumoto, T.	2008	Evolution of First Cores and Formation of Stellar Cores in Rotating Molecular Cloud Cores	ApJ	674	997-1014
68	Saitoh, T.R. , Daisaka, H. , Kokubo, E. , Makino, J. , Okamoto, T. , Tomisaka, K. , Wada, K. and 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?	Publ. Astron. Soc. J	印刷中	
69	Saito, M.M. and Tanikawa, K.	2007	The rectilinear three-body problem using symbol sequence I. Role of triple collision	Cel. Mech. & Dynam	Vol.98,	95 - 120
70	* Sakamoto, K.	2008	Gas Dynamics and Structure of Galaxies : ALMA Targets and Capabilities	ApS&S	313	245
71	Seto, B. , Izumiura, H. , Toyota, E., Kambe, E. , Takeda, T. , Masuda, S. , Omiya, M., Murata, D., Itoh, Y., Ando, H. , Yoshida, M. , Ikoma, M., Kokubo, E. , Ida, S.	2007	A Planetary Companion to the Hyades Giant ϵ Tauri	ApJ	661	527-531
72	Sawai, H., Kotake, K. , Yamada, S	2008	Numerical Simulations of Equatorially Asymmetric Magnetized Supernovae: Formation of Magnetars and Their Kicks	ApJ	672	465-478
73	* Seto, N	2008	Detecting Planets around Compact Binaries with Gravitational Wave Detectors in Space	ApJL	677	55
74	* Seto, N. , Cooray, A.	2007	Searching for Primordial Black Hole Dark Matter with Pulsar Timing Arrays	ApJL	659	33
75	* Seto, N. , Taruya, A.	2007	Measuring a Parity-Violation Signature in the Early Universe via Ground-Based Laser Interferometers	PRL	99	121101
76	* Seto, N. , Taruya, A.	2008	Polarization analysis of gravitational-wave backgrounds from the correlation signals of ground-based interferometers: measuring a circular-polarization mode	PRD in press		
77	* Shiota, D. , Kusano, K., Miyoshi, T. Nishikawa, N. Shibata, K.	2008	A Quantitative MHD Study of the Relation among Arcade Shearing, Flux Rope Formation, and Eruption due to the Tearing Instability	Journal of Geophysical Research - Space	accepted	
78	Shizuma, T., Ishii, T., Makii, H., Hayakawa, T. , Matsuda, M., Shigematsu, S., Ideguchi, E., Zheng,	2008	One-quasiparticle bands in neutron-rich 187W	Physical Review C	77	"047303"
79	Shizuma, T., Ishii, T., Makii, H., Hayakawa, T. , Shigematsu, S. Matsuda, M., Ideguchi, E., Zheng, Y.,	2007	Evidence for a $K\pi = 1/2^+$ isomer in neutron-rich 185Ta	European Physical Journal A	34	1
80	Sumiyoshi, K., Yamada, S. and Suzuki, H.	2007	Dynamics and Neutrino Signal of Black Hole Formation in Non-Rotating Failed Supernovae. I. EOS Dependence	ApJ	667	382-394
81	Suwa, Y., Takiwaki, T., Kotake, K. , Sato, K	2007	Gravitational Wave Background from Population III Stars	ApJL	665	L43-L46
82	Suwa, Y., Takiwaki, T., Kotake, K. , Sato, K	2007	Magnetorotational Collapse of Population III Stars	PASJ	59	771-785
83	Suzuki, T. K., N. Nakasato, H. Baumgardt, A. Ibukiyama, Makino, J. and Ebisuzaki, T.	2007	Evolution of Collisionally Merged Massive Stars	ApJ	668	435-448
84	* Suzuki, T., Chiba, S., Yoshida, T. , Kajino, T. , and Otsuka, T.	2007	Advances in Shell Model Calculations and Neutrino-induced Reactions.	Prog. Part. Nucl. Phys.	59	486-493.
85	Tanikawa, K. and Ito, T.	2007	Subsystems in a stable planetary system	Publ. Astron. Soc. Japan	Vol.59, No.5	989 - 1004
86	Tsukamoto, Y. & Makino, J	2007	Formation of Protoplanets from Massive Planetesimals in Binary Systems	ApJ	669	1316
87	Tsuribe, T. & Omukai, K.	2008	Physical Mechanism for the Intermediate Characteristic Stellar Mass in	ApJ	676	L45-L48
88	* Wada, K., Norman, C.A.	2007	Density Structure of the Interstellar Medium and the Star Formation Rate in Galactic Disks	ApJ	660	276-287
89	* Wada, K.	2007	Origin of Warm High-Velocity Dense Gas in Ultra-Infrared Galaxies	PASJ	59	711-716
90	* Wada, K	2008	Instabilities of Spiral Shocks. II. A Quasi-Steady State in the Multiphase Inhomogeneous ISM	ApJ	675	188-193
91	Watabe, Y., Kawakatu, N. , Imanishi, M.	2008	Nuclear/Circumnuclear Starbursts and Active Galactic Nuclei Mass Accretion in Seyfert Galaxi	ApJ	in press	
92	Wilson, J. R., Mathews, G. J. , Fuller, G. M.	2007	Bulk Viscosity, Decaying Dark Matter, and the Cosmic Acceleration	Phys. Rev. D	75	043521

93	Yamada, M. , Koyama, H., Omukai, K. , and Inutsuka, S.	2007	Synthetic Observations of Carbon Lines of Turbulent Flows in the Diffuse Multiphase Interstellar Medium	ApJ	657	849-859
94	Yamada, M. , Wada, K. and Tomisaka, K.	2007	#CN to HCO Millimeter Line Diagnostics of AGN Molecular Torus. I: Radiative Transfer Modeling	ApJ	671	73-84
95	Yamaguchi, Y. and Tanikawa, K.	2007	Non-Birkhoff periodic orbits of Farey type and dynamical ordering in the standard mapping	Progr. Theor. Phys.	Vol.117, No.4	601 - 632
96	Yamaguchi, Y. and Tanikawa, K.	2007	Non-Birkhoff periodic orbits of Farey type and dynamical ordering	Progr. Theor. Phys.	Vol.118, No.4	675 - 699
97	Yamamoto, K.; Parkinson, D.; Hamana, T.* ; Nichol, R. C.; Suto, Y.	2007	Optimizing future imaging survey of galaxies to confront dark energy and modified gravity models	PRD	76	23504
98	* Yamazaki, D. G. , Ichiki, K., Kajino, T., and Mathews, G. J.	2008	Effects of a primordial magnetic field on low and high multipoles of the cosmic microwave background.	Phys. Rev.	D77	43005
99	Yasutake,N, Kotake,K ,Hashimoto,M, Yamada,S	2007	Effects of QCD phase transition on gravitational radiation from two-dimensional collapse and bounce of massive stars	Physical Review D	75	84012
##	Yoshida, N., Omukai, K. , Hernquist, L.	2007	Formation of Massive Primordial Stars in a Reionized Gas	ApJ	667	L117-L120
##	* Yoshida, T.	2007	Supernova Mixtures Reproducing Isotopic Ratios of Presolar Grains	ApJ	666	1048-1068
##	* Yoshida, T. , Umeda, H., Nomoto, K.	2008	γ -Process Nucleosynthesis in Population III Core-Collapse Supernovae	ApJ	672	1043-1053
##	Zaroubi, S.saleem, Thomas, Rajat M., Sugiyama, Naoshi, and Silk, Joseph	2007	Heating of the intergalactic medium by primordial miniquasars	Monthly Notices of the Royal Astronomical Society	375	1269-1279
##	Zavagno, A., Pomares, M., Deharveng, L., Hosokawa, T. , Russeil, D. & Caplan, J.	2007	Triggered Star Formation on the borders of the Galactic HII region RCW 120	A&A	472	835-846