

Publication List in Refereed Journals (As of June 21, 2008)

Tomonori Totani

The following list is ordered by publication date from older to newer ones.

As of July 1th, 2008

1. Spectrum of the Relic Neutrino Background from Past Supernovae and Cosmological Models
Totani, Tomonori; Sato, Katsuhiko
Astropart. Phys. 3, 367-376 (1995)

2. Effects of Neutrino Oscillation on the Supernova Relic Neutrino Background
Totani, Tomonori; Sato, Katsuhiko
Int. J. Mod. Phys. D. 5, 519-527 (1996)

3. Spectrum of the Supernova Relic Neutrino Background and Evolution of Galaxies
Totani, Tomonori; Sato, Katsuhiko; Yoshii, Yuzuru
Astrophys. J. 460, 303-312 (1996)

4. Resonant Spin-Flavor Conversion of Supernova Neutrinos and Deformation of the Electron Antineutrino Spectrum
Totani, Tomonori; Sato, Katsuhiko
Phys. Rev. D. 54, 5975-5992 (1996)

5. Evolution of the Luminosity Density in the Universe: Implications for the Nonzero Cosmological Constant
Totani, T.; Yoshii, Y.; Sato, K.:
Astrophys. J. Lett. 483, L75-L78 (1997)

6. Cosmological Gamma-Ray Bursts and Evolution of Galaxies
Totani, Tomonori
Astrophys. J. Lett. 486, L71-L74 (1997)

7. Future Detection of Supernova Neutrino Burst and Explosion Mechanism
Totani, T.; Sato, K.; Dalhed, H.E.; Wilson, J.R.
Astrophys. J. 496, 216-225 (1998)

8. Electron Neutrino Mass Measurement by Supernova Neutrino Bursts and Implications for Hot Dark Matter
Totani, Tomonori
Phys. Rev. Lett. 80, 2039-2042 (1998)

9. Does the Number Density of Elliptical Galaxies Change at $z < 1$?
Totani, Tomonori; Yoshii, Yuzuru
Astrophys. J. Lett. 501, L177-L180 (1998)

10. Very Strong TeV Emission as Gamma-Ray Burst Afterglows
Totani, Tomonori
Astrophys. J. Lett. 502, L13-L16 (1998)

11. TeV Burst of Gamma-Ray Bursts and Ultra High Energy Cosmic Rays
Totani, Tomonori
Astrophys. J. Lett. 509, L81-L84 (1998)

12. Probing the Cosmic Star Formation History by Brightness Distribution of Gamma-Ray Bursts
Totani, Tomonori
Astrophys. J. 511, 41-55 (1999)

13. Galaxy Formation by Galactic Magnetic Fields
Totani, Tomonori
Astrophys. J. 517, L69-L72 (1999)

14. Pair-Creation by Very High Energy Photons in Gamma-Ray Bursts: A Unified Picture for Energetics of GRBs
Totani, Tomonori
MNRAS, 307, L41-L45 (1999)

15. Gamma-Ray Bursts, Ultra High Energy Cosmic Rays, and Cosmic Gamma-Ray Background
Totani, Tomonori
Astroparticle Physics, 11, 451-455 (1999)

16. Evolution of Dust Extinction and Supernova Cosmology
Totani, Tomonori; Kobayashi, Chiaki
Astrophys. J. 526, L65 (1999)
17. An Interpretation of the Evidence for TeV Emission from Gamma-Ray Burst 970417a
Totani, Tomonori
Astrophys. J. 536, L23 (2000)
18. Unavoidable Selection Effects in the Analysis of Faint Galaxies in the Hubble Deep Field: Probing the Cosmology and Merger History of Galaxies
Totani, Tomonori; Yoshii, Yuzuru
Astrophys. J. 540, 81-98 (2000)
19. Forming Clusters of Galaxies as the Origin of Unidentified GeV Gamma-ray Sources
Totani, Tomonori; Kitayama, Tetsu
Astrophys. J. 545, 572-577 (2000)
20. Subaru Deep Survey I. Near-Infrared Observations
Maihara, Toshinori; Iwamuro, Fumihide; Tanabe, Hirohisa; Taguchi, Tomoyuki; Hata, Ryuji; Oya, Shin; Kashikawa, Nobunari; Iye, Masanori; Miyazaki, Satoshi; Karoji, Hiroshi; Yoshida, Michitoshi; Totani, Tomonori; Yoshii, Yuzuru; Okamura, Sadanori; Shimasaku, Kazuhiro; Saito, Yoshihiko; Ando, Hiroyasu; Goto, Miwa; Hayashi, Masahiko; Kaifu, Norio; Kobayashi, Naoto; Kosugi, George; Motohara, Kentaro; Nishimura, Tetsuo; Noumaru, Jun'ichi; Ogasawara, Ryusuke; Sasaki, Toshiyuki; Sekiguchi, Kazuhiro; Takata, Tadafumi; Terada, Hiroshi; Yamashita, Takuya; Usuda, Tomonori; Tokunaga, Alan. T.
Pub. Astron. Soc. Japan, 53, 25-36 (2001)
21. Diffuse Extragalactic Background Light versus Deep Galaxy Counts in the Subaru Deep Field: Missing Light in the Universe?
Totani, Tomonori; Yoshii, Yuzuru; Iwamuro, Fumihide; Maihara, Toshinori; Motohara, Kentaro
ApJ 550, L137-L141 (2001)

22. Galaxy Number Counts in the Hubble Deep Field as a Strong Constraint on a Hierarchical Galaxy Formation Model
Nagashima, Masahiro; Totani, Tomonori; Gouda, Naoteru; Yoshii, Yuzuru
ApJ 557, 505-518 (2001)
23. Hyper Extremely Red Objects in the Subaru Deep Field: Evidence for Primordial Elliptical Galaxies in the Dusty Starburst Phase
Totani, Tomonori; Yoshii, Yuzuru; Iwamuro, Fumihide; Maihara, Toshinori; Motohara, Kentaro
ApJ 558, L87-L91 (2001)
24. Near-Infrared Faint Galaxies in the Subaru Deep Field: Comparing the Theory with Observations for Galaxy Counts, Colors, and Size Distributions to $K \sim 24.5$
Totani, Tomonori; Yoshii, Yuzuru; Iwamuro, Fumihide; Maihara, Toshinori; Motohara, Kentaro
ApJ 559, 592-605 (2001)
25. Effects of Neutrino Oscillation on the Supernova Neutrino Spectrum
Takahashi, Keitaro; Watanabe, Mariko; Sato, Katsuhiko; Totani, Tomonori;
Phys.Rev. D64, 093004 (2001)
26. Precessing jets interacting with interstellar material as the origin for the light curves of gamma-ray bursts
Portegies Zwart, Simon. F.; Totani, Tomonori
MNRAS 328, 951 (2001)
27. Preheating in the Universe Suppressing High Energy Gamma-rays from Structure Formation
Totani, Tomonori; Inoue, Susumu
Astroparticle Physics, 17, 79 (2002)
28. A Bridge from Optical to Infrared Galaxies: Explaining Local Properties, Predicting Galaxy Counts and the Cosmic Background Radiation
Totani, Tomonori; Takeuchi, Tsutomu, T.
ApJ, 570, 470-491 (2002)

29. A Deep Optical Observation for an Enigmatic Unidentified Gamma-Ray Source 3EG J1835+5918
Totani, Tomonori; Kawasaki, Wataru; Kawai, Nobuyuki
PASJ 54, L45-L49 (2002)
30. Orphan Afterglows of Collimated Gamma-Ray Bursts: Rate Predictions and Prospects for Detection
Totani, Tomonori; Panaitescu, Alin
ApJ 576, 120-134 (2002)
31. Positional Coincidence between the High-latitude Steady Unidentified Gamma-ray Sources and Possibly Merging Clusters of Galaxies
Kawasaki, Wataru; Totani, Tomonori
ApJ 576, 679-687 (2002)
32. Galaxy Number Counts in the Subaru Deep Field: Multiband Analysis in a Hierarchical Galaxy Formation Model
Nagashima, Masahiro; Yoshii, Yuzuru; Totani, Tomonori; Gouda, Naoteru
ApJ 578, 675-688 (2002)
33. Subaru Deep Survey. III. Evolution of Rest-Frame Luminosity Functions
Based on the Photometric Redshifts for a K'-Band-Selected Galaxy Sample
Kashikawa, Nobunari; Takata, Tadafumi; Ohyama, Youichi; Yoshida, Michitoshi;
Maihara, Toshinori; Iwamuro, Fumihide; Motohara, Kentaro; Totani, Tomonori;
Nagashima, Masahiro; Shimasaku, Kazuhiro; Furusawa, Hisanori; Ouchi,
Masami; Yagi, Masafumi; Okamura, Sadanori; Iye, Masanori; Sasaki, Toshiyuki;
Kosugi, George; Aoki, Kentaro; Nakata, Fumiaki:
The Astronomical Journal, 125, 53-65 (2003)
34. Detectability of the Supernova Relic Neutrinos and Neutrino Oscillation
Ando, S.; Sato, K.; Totani, T.
Astropart. Phys. 18, 307-318 (2003)
35. Cluster-Cluster Microlensing as a Probe of Intracluster Stars, MACHOs,
and Remnants of the First-Generation Stars
Totani, Tomonori

The Astrophysical Journal, 586, 735-744 (2003)

36. On the Spectrum and Spectropolarimetry of Type Ic Hypernova SN 2003dh/GRB 030329

Kawabata, K. S.; Deng, J.; Wang, L.; Mazzali, P.; Nomoto, K.; Maeda, K.; Tominaga, N.; Umeda, H.; Iye, M.; Kosugi, G.; Ohyama, Y.; Sasaki, T.; Hoflich, P.; Wheeler, J. C.; Jeffery, D. J.; Aoki, K.; Kashikawa, N.; Takata, T.; Kawai, N.; Sakamoto, T.; Urata, Y.; Yoshida, A.; Tamagawa, T.; Torii, K.; Aoki, W.; Kobayashi, N.; Komiyama, Y.; Mizumoto, Y.; Noumaru, J.; Ogasawara, R.; Sekiguchi, K.; Shirasaki, Y.; Totani, T.; Watanabe, J.; Yamada, T.

The Astrophysical Journal, 593, L19-L22 (2003)

37. A Failed Gamma-Ray Burst with Dirty Energetic Jets Spirited Away? New Implications for the Gamma-Ray Burst-Supernova Connection from SN 2002ap
Totani, Tomonori

The Astrophysical Journal, 598, 1151-1162 (2003)

38. Constraints on models for TeV gamma rays from gamma-ray bursts

Fragile, P. Chris; Mathews, Grant J.; Poirier, John; Totani, Tomonori

Astroparticle Physics, 20, 591-607 (2004)

39. Spectral Evolution of the GRB 030329 Afterglow: Detection of the Supernova Nebular Phase Emissions

Kosugi, George; Mizumoto, Yoshihiko; Kawai, Nobuyuki; Yoshida, Atsumasa; Kawabata, Koji S.; Totani, Tomonori; Iye, Masanori; Sekiguchi, Kazuhiro; Aoki, Kentaro; Ohyama, Youichi; Aoki, Wako; Kobayashi, Naoto; Komiyama, Yutaka; Noumaru, Jun'ichi; Ogasawara, Ryusuke; Sakamoto, Takanori; Shirasaki, Yuji; Takata, Tadafumi; Tamagawa, Toru; Torii, Ken'ichi; Urata, Yuji; Watanabe, Jun-Ichi; Yamada, Toru; Qiu, Yulei;

PASJ, 56, 61--68 (2004)

40. Solving the Cooling Flow Problem of Galaxy Clusters by Dark Matter Neutralino Annihilation

Totani, Tomonori

Phys. Rev. Lett. 92, 191301--191304 (2004)

41. Submillimetre constraints on hyper-extremely red objects in the Subaru Deep Field
Coppin, Kristen; Halpern, Mark; Scott, Douglas; Marsden, Gaelen; Iwamuro, Fumihide; Maihara, Toshinori; Motohara, Kentaro; Totani, Tomonori
MNRAS, 354, 193-198 (2004)

42. A Discovery of Rapid Optical Flares from Low-Luminosity Active Nuclei in Massive Galaxies
Totani, Tomonori; Sumi, Takahiro; Kosugi, George; Yasuda, Naoki; Doi, Mamoru; Oda, Takeshi
The Astrophysical Journal, 621, L9-L12 (2005)

43. Ultraluminous X-Ray Sources: Evidence for Very Efficient Formation of Population III Stars Contributing to the Cosmic Near-Infrared Background Excess?
Mii, Haruka; Totani, Tomonori
The Astrophysical Journal, 628, 873-878 (2005)

44. Subaru Super Deep Field with Adaptive Optics. I. Observations and First Implications
Minowa, Yosuke; Kobayashi, Naoto; Yoshii, Yuzuru; Totani, Tomonori; Maihara, Toshinori; Iwamuro, Fumihide; Takami, Hideki; Takato, Naruhisa; Hayano, Yutaka; Terada, Hiroshi; Oya, Shin; Iye, Masanori; Tokunaga, Alan T.
The Astrophysical Journal 629, 29-44 (2005)

45. Deciphering the Cosmic Star Formation History and the Nature of Type Ia Supernovae with Future Supernova Surveys
Oda, Takeshi; Totani, Tomonori
The Astrophysical Journal, 630, 59-67 (2005)

46. The afterglow of GRB 050709 and the nature of the short-hard gamma-ray bursts
Fox, D. B.; Frail, D. A.; Price, P. A.; Kulkarni, S. R.; Berger, E.; Piran, T.; Soderberg, A. M.; Cenko, S. B.; Cameron, P. B.; Gal-Yam, A.; Kasliwal, M. M.; Moon, D.-S.; Harrison, F. A.; Nakar, E.; Schmidt, B. P.; Penprase, B.; Chevalier, R. A.; Kumar, P.; Roth, K.; Watson, D.; Lee, B. L.; Sheckman, S.; Phillips, M. M.; Roth, M.; McCarthy, P. J.; Rauch, M.; Cowie, L.; Peterson, B. A.; Rich, J.; Kawai, N.; Aoki, K.; Kosugi, G.; Totani, T.; Park, H.-S.; MacFadyen, A.; Hurley, K. C.
Nature, 437, 845-850 (2005)

47. Gamma-Ray Background from Neutralino Annihilation in the First Cosmological Objects
Oda, Takeshi; Totani, Tomonori; Nagashima, Masahiro
The Astrophysical Journal, 633, L65-L68 (2005)
48. An optical spectrum of the afterglow of a gamma-ray burst at a redshift of $z = 6.295$
Kawai, N.; Kosugi, G.; Aoki, K.; Yamada, T.; Totani, T.; Ohta, K.; Iye, M.; Hattori, T.;
Aoki, W.; Furusawa, H.; Hurley, K.; Kawabata, K. S.; Kobayashi, N.; Komiyama,
Y.; Mizumoto, Y.; Nomoto, K.; Noumaru, J.; Ogasawara, R.; Sato, R.; Sekiguchi,
K.; Shirasaki, Y.; Suzuki, M.; Takata, T.; Tamagawa, T.; Terada, H.; Watanabe,
J.; Yatsu, Y.; Yoshida, A.
Nature, 440, 184-186 (2006)
49. Gamma-Ray Luminosity Function of Blazars and the Cosmic Gamma-Ray
Background: Evidence for the Luminosity-Dependent Density Evolution
Narumoto, Takuro; Totani, Tomonori
The Astrophysical Journal, 643, 81-91 (2006)
50. Implications for Cosmic Reionization from the Optical Afterglow Spectrum of the
Gamma-Ray Burst 050904 at $z = 6.3$
Totani, Tomonori; Kawai, Nobuyuki; Kosugi, George; Aoki, Kentaro; Yamada, Toru;
Iye, Masanori; Ohta, Kouji; Hattori, Takashi
Publications of the Astronomical Society of Japan, 58, 485-498 (2006)
51. Galaxy morphology and evolution from SWAN adaptive optics imaging
Cresci, G.; Davies, R. I.; Baker, A. J.; Mannucci, F.; Lehnert, M. D.; Totani, T.;
Minowa, Y.
Astronomy and Astrophysics, 458, 385-396 (2006)
52. A RIAF Interpretation for the Past Higher Activity of the Galactic Center Black
Hole and the 511 keV Annihilation Emission
Totani, Tomonori
Publ. Astron. Soc. Japan, 58, 965-977 (2006)
53. Dark matter annihilation or unresolved astrophysical sources? Anisotropy probe
of the origin of the cosmic gamma-ray background

Ando, Shin'Ichiro; Komatsu, Eiichiro; Narumoto, Takuro; Totani, Tomonori
Physical Review D, vol. 75, 063519-1 to 063519-17 (2007)

54. Angular power spectrum of gamma-ray sources for GLAST: blazars and clusters of galaxies

Ando, Shin'ichiro; Komatsu, Eiichiro; Narumoto, Takuro; Totani, Tomonori
Monthly Notices of the Royal Astronomical Society, 376, 1635-1647 (2007)

55. Ly α Emitters in Hierarchical Galaxy Formation

Kobayashi, Masakazu A. R.; Totani, Tomonori; Nagashima, Masahiro
Astrophys. J. 670, 919-927 (2007)

56. Supernovae in the Subaru Deep Field: an initial sample and Type Ia rate out to redshift 1.6

Poznanski, D.; Maoz, D.; Yasuda, N.; Foley, R. J.; Doi, M.; Filippenko, A. V.;
Fukugita, M.; Gal-Yam, A.; Jannuzi, B. T.; Morokuma, T.; Oda, T.; Schweiker, H.;
Sharon, K.; Silverman, J. M.; Totani, T.
Monthly Notices of the Royal Astronomical Society, 382, 1169-1186 (2007)

57. The Cosmic MeV Gamma-Ray Background and Hard X-Ray Spectra of Active Galactic Nuclei: Implications for the Origin of Hot AGN Coronae

Inoue, Yoshiyuki; Totani, Tomonori; Ueda, Yoshihiro
The Astrophysical Journal, Volume 672, L5-L8. (2008)

58. The Subaru/XMM-Newton Deep Survey (SXDS). VI. Properties of Active Galactic Nuclei Selected by Optical Variability

Morokuma, Tomoki; Doi, Mamoru; Yasuda, Naoki; Akiyama, Masayuki; Sekiguchi, Kazuhiro; Furusawa, Hisanori; Ueda, Yoshihiro; Totani, Tomonori; Oda, Takeshi; Nagao, Tohru; Kashikawa, Nobunari; Murayama, Takashi; Ouchi, Masami; Watson, Mike G.

The Astrophysical Journal, Volume 676, Issue 1, pp. 121-130 (2008)

59. The Subaru/XMM-Newton Deep Survey (SXDS). V. Optically Faint Variable Object Survey

Morokuma, Tomoki; Doi, Mamoru; Yasuda, Naoki; Akiyama, Masayuki; Sekiguchi, Kazuhiro; Furusawa, Hisanori; Ueda, Yoshihiro; Totani, Tomonori; Oda,

Takeshi; Nagao, Tohru; Kashikawa, Nobunari; Murayama, Takashi; Ouchi, Masami; Watson, Mike G.; Richmond, Michael W.; Lidman, Christopher; Perlmutter, Saul; Spadafora, Anthony L.; Aldering, Greg; Wang, Lifan; Hook, Isobel M.; Knop, Rob A.

The Astrophysical Journal, Volume 676, 163-183 (2008)

60. Reionization and Galaxy Evolution Probed by $z = 7$ Ly α Emitters

Ota, Kazuaki; Iye, Masanori; Kashikawa, Nobunari; Shimasaku, Kazuhiro; Kobayashi, Masakazu; Totani, Tomonori; Nagashima, Masahiro; Morokuma, Tomoki; Furusawa, Hisanori; Hattori, Takashi; Matsuda, Yuichi; Hashimoto, Tetsuya; Ouchi, Masami

The Astrophysical Journal, Volume 677, 12-26. (2008)

61. Intracluster Short Gamma-Ray Bursts by Compact Binary Mergers

Niino, Yuu; Totani, Tomonori

The Astrophysical Journal, Volume 677, L23-L26 (2008)

62. Implications for Galaxy Evolution from Cosmic Evolution of the Supernova Rate Density

Oda, T.; Totani, T.; Yasuda, N.; Sumi, T.; Morokuma, T.; Doi, M.; Kosugi, G.

Pub. Astron. Soc. Jpn., 60, 169-182 (2008)