Curriculum Vitae

Ikuru IWATA
Associate Professor
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Research Field: Observational astronomy, galaxy evolution
Date of Birth: 25 January 1972
Nationality: Japan

Professional Experiences

- Associate Professor / Associate Director, Subaru Telescope, National Astronomical Observatory of Japan
  June 2013 – Present
- Assistant Professor, Subaru Telescope, National Astronomical Observatory of Japan
  July 2010 – May 2013
- Assistant Professor, Okayama Astrophysical Observatory, National Astronomical Observatory of Japan
  Oct 2004 – June 2010
- Researcher, Subaru Telescope, National Astronomical Observatory of Japan
  (under Dr. T. Yamada, NAOJ)
  Apr 2004 – Sep 2004
- Kyoto Univ. 21 COE Research Fellow
  (under Dr. K. Ohta, Kyoto Univ.)
  Oct 2003 – Mar 2004
- JSPS Research Fellow
  (under Dr. K. Ohta, Kyoto Univ.)
  Apr 2002 – Sept 2003
- Researcher/Curator, Toyama Science Museum / Astronomical Observatory, Toyama, Japan
  Apr 1996 – Mar 1999

Education

- Graduate School, Doctor Course:
  Department of Astronomy, Faculty of Science, Kyoto University, Japan
  Apr 2000 – Mar 2003
  (Thesis: "Lyman Break Galaxies at $z \sim 5$: Luminosity Function", Kyoto University, March 2003)
- Research Student:
  Department of Astronomy, Faculty of Science, Kyoto University, Japan
  Apr 1999 – Mar 2000
- Graduate School, Master Course:
  Department of Astronomy, Faculty of Science, Kyoto University, Japan
  Apr 1995 – Mar 1996

- University: Faculty of Science, Kyoto University, Japan
  Apr 1991 – Mar 1995

Award

- March 2008, Astronomical Society of Japan, The PASJ Excellent Paper Award, for the paper "Lyman Break Galaxies at $z \sim 5$: Luminosity Function", I. Iwata et al., 2003, PASJ 55, 415.

Grants

- **JSPS Grant-in-aid (PI) FY2012–2015**: *Exploring the evolution of Lyman continuum galaxies with very wide-field deep surveys*
  total 28.2M JPY (0.28M USD)
- **JSPS Grant-in-aid (co-I, Project Scientist) FY2011–2014**: *Exploring the origin of galaxy morphologies with wide-field multi-object spectroscopy and integral-field spectroscopy*
  total 165.6M JPY (1.66M USD)
- **JAXA/ISAS Strategic development programs (co-I, Project Scientist) FY2009–2014**: *Development of WISH (Wide-field Imaging Surveyor for High-redshift)*
  approx. 20M–30M JPY (0.2M–0.3M USD) annually
- **JSPS Grant-in-aid (PI) FY2007**: *Escape of Lyman continuum from star-forming galaxies in the early Universe*
  10M JPY (0.1M USD)
- **JSPS fellow (Doctor course and Post-doc) FY2001–2003**

Telescope / Instrument Projects involved

- **Hyper Suprime-Cam Subaru Strategic Survey, 2013–Present**
  Co-PI (Observatory liaison person)
  http://hsc.mtk.nao.ac.jp/ssp/
- **ULTIMATE-SUBARU: Ground-layer Adaptive Optics and New Infrared Instruments for Subaru Telescope, 2010–Present**
  Project scientist / project coordinator
  http://www.naoj.org/Projects/newdev/ngao/
- **WISH: Wide-field Imaging Surveyor for High-redshift, 2008–Present**
  Project scientist / project coordinator
  http://wishmission.org
- **KOOLS: Kyoto-Okayama Optical Low-resolution Spectrograph for 1.88m telescope at Okayama Astrophysical Observatory, 2004–2010**
  PI of the instrument (2005–)
  http://www.oao.nao.ac.jp/%7Ekools/

Publications in refereed journals

A: *As a first author*

1. "Is the far border of the Local Void expanding?",
   Ikuru Iwata and Pierre Chamaraux, A& A 531, A87 (2011)

2. "Detections of Lyman Continuum from Star-forming Galaxies at $z \sim 3$ Through Subaru/Suprime-Cam Narrow-band Imaging",
   Ikuru Iwata, Akio K. Inoue, Yuichi Matsuda, Hisanori Furusawa, Tomoki Hayashino, Katsuki Kousai, Masayuki Akiyama, Toru Yamada, Denis Burgarella, and Jean-Michel Deharveng, Astrophysical Journal 692, 1287-1293 (2009)

3. "Differential Evolution of the UV Luminosity Function of Lyman Break Galaxies from $z \sim$5 to 3",
   Ikuru Iwata, Kouji Ohta, Naoyuki Tamura, Masayuki Akiyama, Kentaro Aoki, Masataka Ando, Gaku Kiuchi and Marcin Sawicki, MNRAS 376, 1557(2007)

4. "Spectroscopy and Stellar Populations of Star-forming Galaxies at $z \sim 3$ in the Hubble Deep Field - South",
   Ikuru Iwata, Akio K. Inoue, Denis Burgarella, A&A 440, 881-892 (2005)

5. "Lyman Break Galaxies at $z \sim 5$: Luminosity Function",
   Ikuru Iwata, Kouji Ohta, Naoyuki Tamura, Masataka Ando, Shinpei Wada, Chisato Watanabe, Masayuki Akiyama, Kentaro Aoki, PASJ 55, 415 (2003)

6. "CO(J=6-5) Observations of the Quasar SDSS1044-0125 at z=5.8",
   Ikuru Iwata, Kouji Ohta, Kouichiro Nakanishi, Koutaro Kohno, Richard G. McMahon, PASJ 53, 871 (2001)

7. "Possible Young Stellar Objects without Detectable CO Emission",
   Ikuru Iwata, Shin-ichiro Okumura, Mamoru Saitō, PASJ 51, 653 (1999)

8. "A Near-Infrared Imaging Search for Invisible Galaxies behind the Milky Way",
   Ikuru Iwata, Kouichiro Nakanishi, Tsutomu Takeuchi, Mamoru Saitō, Takuya Yamashita, Eiji Nishihara, Sin-ichiro Okumura, PASJ 49, 47 (1997)

B: *As a co-author*

1. "A hard ionizing spectrum in $z = 3 - 4$ Lyα emitters with intense [OIII] emission: analogs of galaxies in the reionization era?",
   Kimihiko Nakajima, Richard Ellis, Ikuru Iwata, Akio Inoue, Haruka Kusakabe, Masami Ouchi, Brant Robertson, accepted for publication in ApJ Letters (arXiv:1608.08222)

2. "Lyman continuum leaking AGN in the SSA22 field",
   Genoveva Micheva, Ikuru Iwata, Akio K. Inoue, accepted for publication in MNRAS (arXiv:1604.00102)

3. "Searching for candidates of Lyman continuum sources - revisiting the SSA22 field",
   Genoveva Micheva, Ikuru Iwata, Akio K. Inoue, Yuichi Matsuda, Toru Yamada, accepted for publication in MNRAS (arXiv:1509.03996)

4. "An updated analytic model for attenuation by the intergalactic medium",
   Akio K. Inoue, Ikkoh Shimizu, Ikuru Iwata, Masayuki Tanaka, MNRAS 442, 1805 (2014)

5. "A Gravitational Lens Model for the Lyα Emitter LAE 221724+001716 at $z = 3.1$ in the SSA 22 Field",
   Nakahiro, Y., Taniguchi, Y., Inoue, A. K., Shioya, Y., Kajisawa, M., Kobayashi, M. A. R., Iwata, I., Matsuda, Y., Hayashino, T., Tanaka, A. R., Hamada, K., ApJ 766, 122 (2013)

6. "An Hα search for overdense regions at z = 2.23",
Matsuda, Y., Smail, I., Geach, J. E., Best, P. N., Sobral, D., Tanaka, I., Nakata, F., Ohta, K., Kurk, J., Iwata, I., and 8 authors, MNRAS 416, 2041 (2011)

7. "Lyman 'bump' galaxies - II. A possible signature of massive extremely metal-poor or metal-free stars in $z = 3.1$ Ly-alpha emitters",
Akio K. Inoue, Katsuki Kousai, Ikuru Iwata, Yuichi Matsuda, et al. MNRAS 411, 2336 (2011)

8. "Stellar Populations of Lyα Emitters at z=4.86: A Comparison to z $\sim$5 Lyman Break Galaxies",
Suraphong Yuma, Kouji Ohta, Kiyoto Yabe, Kazuhiro Shimasaku, Makiko Yoshida, Masami Ouchi, Ikuru Iwata, Marcin Sawicki, ApJ 720, 1016 (2010)

9. "Lyman Break Galaxies at $z \sim 5$: Rest-Frame UV Spectra. III.",
Hiroki Kajino, Kouji Ohta, Ikuru Iwata, Kiyoto Yabe, Suraphong Yuma, Masayuki Akiyama, Naoyuki Tamura, Kentaro Aoki, Marcin Sawicki, ApJ 704, 117 (2009)

10. "The Stellar Populations of Lyman Break Galaxies at $z \sim 5$",
Kiyoto Yabe, Kouji Ohta, Ikuru Iwata, Marcin Sawicki, Naoyuki Tamura, Masayuki Akiyama, Kentaro Aoki, ApJ 693, 507 (2009)

11. "A Monte Carlo simulation of the intergalactic absorption and the detectability of the Lyman continuum from distant galaxies"
Akio K. Inoue and Ikuru Iwata, MNRAS 387, 1681 (2008)

12. "The Subaru/XMM-Newton Deep Survey (SXDS). II. Optical Imaging and Photometric Catalogs"
Furusawa, Hisanori; Kosugi, George; Akiyama, Masayuki; Takata, Tadafumi; Sekiguchi, Kazuhiro; Tanaka, Ichi; Iwata, Ikuru; Kajisawa, Masaru; Yasuda, Naoki; Doi, Mamoru et al., ApJS 176, 1 (2008)

13. "Adaptive Optics Rest-Frame V-band Imaging of Lyman Break Galaxies at $z \sim 3$: High-surface Density Disk-like Galaxies ?",
Masayuki Akiyama, Yousuke Minowa, Naoto Kobayashi, Kouji Ohta, Masataka Ando, Ikuru Iwata, ApJS 175, 1 (2008)

14. "Lyman Break Galaxies at z $\sim$5: Rest-frame UV Spectra II",
Masataka Ando, Kouji Ohta, Ikuru Iwata, Masayuki Akiyama, Kentaro Aoki, Naoyuki Tamura, PASJ 59, 717 (2007)

15. "CO Observations of a FeLoBAL Quasar with an Hα Absorption Line at $z = 2.3$",
Kouji Ohta, Gaku Kiuchi, Kouichiro Nakanishi, Kentaro Aoki, Ikuru Iwata, Masayuki Akiyama, Naoyuki Tamura, Masataka Ando, PASJ 59, 527 (2007)

16. "Escape fraction of ionizing photons from galaxies at z=0–6",
Akio K. Inoue, Ikuru Iwata, Jean-Michel Deharveng, MNRAS 371, L1 (2006)

17. "Masses of high-z galaxy hosting haloes from angular clustering and their evolution in the cold dark matter model",
Takashi Hamana, Toru Yamada, Masami Ouchi, Ikuru Iwata, Tadayuki Kodama, MNRAS 369, 1929 (2006)

18. "Deficiency of Large Equivalent Width Lyα Emission in Luminous Lyman Break Galaxies at z $\sim$5-6?",
Ando, M., Ohta, K., Iwata, I., Akiyama, M., Aoki, K., Tamura, N. ApJ 645, L9 (2006)

19. "The Number Density of Old Passively Evolving Galaxies at z=1 in the Subaru/XMM-Newton Deep Survey Field",
Yamada, T., Kodama, T., Akiyama, M., Furusawa, H., Iwata, I., et al. ApJ 634, 861 (2005)

20. "Upper limit on Lyman continuum flux escaping from galaxies at $z \sim 3$ using VLT narrow-band photometry",
A. K. Inoue, I. Iwata, J.-M. Deharveng, V. Buat, D. Burgarella, A&A 435, 471 (2005)

21. "Lyman Break Galaxies at $z \sim 5$: Rest-Frame Ultraviolet Spectra",
Ando M., Ohta K., Iwata I., Watanabe C., Tamura N., Akiyama M., Aoki K., ApJ 610, 635 (2004)

22. "A visual search for galaxies at a Milky Way region around the North Supergalactic pole",
Roman A. T., Iwata I., Saitō M., ApJS 127, 27 (2000)

23. "Near-Infrared Photometry of Evolved Planetary Nebulae",
Saitō M., Iwata I., Okumura S., Mori A., Yamashita T., PASJ 51, 673 (1999)

24. "Photometric Properties of Kiso Ultraviolet-Excess Galaxies in the Lynx - Ursa Major region",
Takeuchi T. T., Tomita A., Nakanishi K., Ishii T. T., Iwata I., Saitō M., ApJS 121, 445 (1999)