## Masahiro Oroku

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### CAREER

Oct 2020 - Present Researcher, Advanced Technology Lab, Recruit Co., Ltd.

Apr 2016 - Sep 2020 Data Scientist, Recruit Co., Ltd.

Nov 2013 - Mar 2014 Technical Staff, Institute of Innovation Research, Hitotsubashi University

Apr 2011 - Mar 2013 Research Fellow(DC2), Japan Society for the Promotion of Science

### **EDUCATION**

Mar 2016	Master of Arts in Economics, The University of Tokyo Thesis: Academia-Industry Relationships: Analysis of Non-Patent Citations
Mar 2013	Doctor of Science in Physics, The University of Tokyo Thesis: Study on a Precise Beam Size Monitor Using Laser Interferometer
Mar 2009	Master of Science in Physics, The University of Tokyo Thesis: Experimental Study of Gamma-ray Detector for the Shintake Beam-size Monitor
Mar 2007	Bachelor of Science in Physics, The University of Tokyo

## FIELDS OF INTEREST

Innovation and knowledge production, particle physics experiment

### WORKING PAPERS

- 1. K. Oikawa, M. Oroku, M. Nirei, "Economic Growth through Basic Research by Firms: A Science Linkage Approach" *RIETI Discussion Paper Series*, 24-E-013, 2024.
- M. Oroku, "Are firms able to take advantage of academic advances?," RIETI Discussion Paper Series, 24-E-036, 2024.

### Published Articles

- J. Yan, Y. Yamaguchi, Y. Kamiya, S. Komamiya, M. Oroku, T. Okugi, N. Terunuma, K. Kubo, T. Tauchi, J. Urakawa, "Measurement of nanometer electron beam sizes with laser interference using Shintake Monitor," Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, vol. 740, pp. 131–137, 2014.
- 2. P. Bambade, M. Oroku, N. Terunuma, J. Urakawa, S. Araki *et al.* (ATF Collaboration), "Present status and first results of the final focus beamline at the KEK Accelerator Test Facility," *Physical Review Special Topics Accelerators and Beams*, vol. 13, p. 042801, 2010.
- 3. T. Suehara, M. Oroku, T. Yamanaka, H. Yoda, T. Nakamura, Y. Kamiya, Y. Honda, T. Kume, T. Tauchi, T. Sanuki, and S. Komamiya, "Design of a nanometer beam size monitor for ATF2," *Nuclear Instruments and Methods in Physics Research Section A*, vol. 616, no. 1, pp. 1–8, 2010.

## PRESENTATIONS

#### Refereed

- 1. M. Oroku et al., "The nanometer beam size monitor (Shintake monitor) at ATF2," in *IEEE Nuclear Science Symposium*, Medical Imaging Conference, and Room Temperature Semiconductor Detector Workshop (NSS/MIC/RTSD), Knoxville, Tennessee, USA, Nov. 2010. (Oral Presentation)
- 2. M. Oroku et al., "Gamma detector for the Shintake monitor at ATF2, the ILC test beam facility," in *IEEE Nuclear Science Symposium, Medical Imaging Conference, and Room Temperature Semiconductor Detector Workshop (NSS/MIC/RTSD)*, Dresden, Germany, Oct. 2008. (Poster Presentation)

#### Not Refereed

- 1. M. Oroku and M. Nirei, "Structural linkage between academic fields and industrial classification: Analysis of non-patent citations," Workshop on Economic Growth Analysis and Evaluation of Science, Technology and Innovation Policies, Shonan Village Center, Hayama, Japan, Jun. 2015.
- 2. M. Oroku *et al.*, "IPBSM: hardware upgrade and future plan," 14th ATF2 Project Meeting, KEK, Tsukuba, Japan, Jun. 2012.
- 3. M. Oroku *et al.*, "IPBSM: plans and strategy to make the IPBSM operationally reliable," 13th ATF2 Project Meeting, KEK, Tsukuba, Japan, Jan. 2012.
- 4. M. Oroku *et al.*, "IP-BSM status and plan: beamtime result in Nov. and Dec. 2010," ATF Project Meeting, SLAC, California, USA, Jan. 2011.
- 5. M. Oroku *et al.*, "Measurement of nanometer-scale beam size by the Shintake monitor," International Conference on Physics in Intense Fields (PIF2010), KEK, Tsukuba, Japan, Nov. 2010.
- 6. M. Oroku *et al.*, "Discussion of testing and planning for Shintake monitor in ATF2; including discussion of gamma detectors," Fifth ATF2 Project Meeting, KEK, Tsukuba, Japan, Dec. 2007.
- 7. M. Oroku, CMS CASTOR group, "Beam test results-HD1 response with old and new cut quartz plates," CMS Week, CERN, Geneva, Switzerland, Sep. 2007.

#### Domestic

- 1. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Hiroshima University, Japan, Mar. 2013.
- 2. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Niigata University, Japan, Mar. 2011.
- 3. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Kyushu University, Japan, Sep. 2010.
- 4. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Okayama University, Japan, Mar. 2010.
- 5. M. Oroku et al., Annual Meeting, Particle Accelerator Society of Japan, J-Parc, Japan, Autumn 2009.
- 6. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Rikkyou University, Japan, Mar. 2009.
- 7. M. Oroku et al., Annual Meeting, The Physical Society of Japan (JPS), Kinki University, Japan, Mar. 2008.

### Grants and Scholarships

Sep 2013 - Sep 2014 Research Assistant(RA) of Hitotsubashi University, Japan

Apr 2010 - Mar 2011 Research Assistant(RA) of KEK, Japan

Apr 2009 - Mar 2011 Research Assistant(RA) of the University of Tokyo, Japan

Oct 2007 - Mar 2008 Teaching Assistant(TA) of the University of Tokyo, Japan

Jul 2007 - Oct 2007 CERN summer student, Geneva, Switzerland

# ACADEMIC SERVICES

Referee experience The Japanese Society for Artificial Intelligence