

Curriculum Vitae

(Last updated: 24 June, 2011)

Name: Satoshi Kasahara
Date of birth: 05.12.1981
Nationality: Japanese
E-mail: kshr@stp.isas.jaxa.jp

Interests

Charged particle measurements, Planetary magnetospheric dynamics

Educational background

April, 2000 - March, 2004
Undergraduate student at The University of Tokyo
April, 2004 - March, 2009
Master course (2004-2006) and Ph.D. course (2006-2009) student at
department of Earth and Planetary Science, The University of Tokyo
(supervisors: Toshifumi Mukai and Yoshifumi Saito)

Professional experience

April, 2009 - March, 2011
Project researcher at Japan Aerospace Exploration Agency
(also, part-time lecturer at Kogakuin University for Sep/2009-Mar/2011)
April, 2011-
Assistant Professor at Institute of Space and Astronautical Science

Awards

- Student paper award in SGEPSS (Society of Geomagnetism and Earth, Planetary, and Space Sciences) autumn meeting, 2005.
- Encouraging prize for doctoral thesis, The University of Tokyo, 2009.

List of Publications

(as the first author)

- Kasahara, S., E. A. Kronberg, N. Krupp, T. Kimura, C. Tao, S. V. Badman, A. Retino, M. Fujimoto, "Magnetic reconnection in the Jovian tail: X-line evolution and consequent plasma sheet structures", submitted to JGR (Space Physics).
- Kasahara, S., T. Takashima, K. Asamura, and T. Mitani, "Development of an APD with Large Area and Thick Depletion Layer for Energetic Electron Measurements in Space", IEEE Transactions on Nuclear Science, IEEE Transactions on Nuclear Science, vol. 57, No. 3, pp. 841-847, 2010.
- Kasahara, S., Y. Miyashita, T. Takada, M. Fujimoto, V. Angelopoulos, H. U. Frey, J. Bonnell, J. P. McFadden, D. Larson, K. H. Glassmeier, H. U. Auster, W. Magnes, and I. Mann, "Spatial distributions of electromagnetic field variations and injection regions during the 20 November 2007 sawtooth event", Annales Geophysicae, 27, pp. 3825-3840, 2009.
- Kasahara, S., T. Mitani, K. Ogasawara, T. Takashima, M. Hirahara, and K. Asamura, "Application of single-sided silicon strip detector to energy and charge state measurements of medium energy ions in space", Nuclear Inst. and Methods in Physics Research, A, A 603, pp. 355-360, DOI: 10.1016/j.nima.2009.02.004., 2009.
- Kasahara, S., K. Asamura, K. Ogasawara, Y. Kazama, T. Takashima, M. Hirahara, and Y. Saito, "A Noise Attenuation Method for the Medium-energy Electron Measurements in the Radiation Belt", Advances in Space Research, vol. 43, issue 5, 792-801, 2009.
- Kasahara, S., K. Asamura, T. Takashima, M. Hirahara, K. Ogasawara, and Y. Saito, "Next-Generation Plasma Particle Measurements in the Medium Energy Range: Development of Cusp Type Electrostatic Analyser and Ion Mass Analysis Unit", Proc. Future Perspectives of Space Plasma and Particle Instrumentation and International Collaborations, pp. 179-182, 2009.
- Kasahara, S., H. Hasegawa, K. Keika, Y. Miyashita, M. N. Nishino, T. Sotirelis, Y. Saito, and T. Mukai, "Escape of high-energy oxygen ions through magnetopause reconnection under northward IMF", Annales Geophysicae, 26, 3955-3966, 2008.
- Kasahara, S., K. Asamura, K. Ogasawara, T. Mitani, M. Hirahara, T. Takashima, Y. Saito, and T. Mukai, "Medium Energy Ion Mass Spectrometer Capable of Measurements of Three Dimensional Distribution Functions in Space", IEEE Transactions on Plasma Science, vol. 36, issue 3, pp. 841-847, 2008.

- Kasahara, S., K. Asamura, Y. Saito, T. Takashima, M. Hirahara and T. Mukai, "Cusp type electrostatic analyzer for measurements of medium energy charged particles", Review of Scientific Instruments, vol.77, 123303, doi: 10.1063/1.2405358, 2006.

(as a coauthor)

- Ebihara, Y., S. Kasahara, K. Seki, Y. Miyoshi, T. A. Fritz, J. Chen, M. Grande, and T. Zurbuchen, Simultaneous entry of oxygen ions originating from the Sun and Earth into the inner magnetosphere during magnetic storms, J. Geophys. Res., 114, A05219, doi:10.1029/2009JA014120, 2009.
- Retino, A., R. Nakamura, A. Vaivads, Y. Khotyantsev, T. Hayakawa, K. Tanaka, S. Kasahara, M. Fujimoto, I. Shinohara, J. Eastwood, M. M. Andre, W. Baumjohann, P. Daly, E. Kronberg, N. Cornilleau-Wehrlin, "Cluster observations of energetic electrons and electromagnetic fields within a reconnecting thin current sheet in the Earth's magnetotail", J. Geophys. Res., 113, A12215, doi:10.1029/2008JA013511, 2008.
- Ogasawara, K., M. Hirahara, W. Miyake, S. Kasahara, T. Takashima, K. Asamura, Y. Saito, and T. Mukai, "High-resolution detection of 100 keV electrons using avalanche photodiodes", Nuclear Inst. and Methods in Physics Research, A., DOI: 10.1016/j.nima.2008.05.05, 2008.