# Program (Poster Session)  
November 19, 16:10-18:15, Room 703 (7F)  

## P-1  
Masato Koike¹, Takashi Imazono¹, Masaru Koeda², Tetsuya Nagano², Hiroyuki Sasa³, Yuki Oue², Zeno Yonezawa², Satoshi Kuramoto⁴, Masami Terauchi⁵, Nobuo Handa⁶, Takanori Murano⁷, and Eric M. Gullikson⁸  

1 Quantum Beam Science Directorate, Japan Atomic Energy Agency  
2 Device Department, Shimadzu Corporation  
3 Institute of Multidisciplinary Research for Advanced Materials, Tohoku University  
4 EO Peripheral Components Business Unit, JEOL Ltd  
5 Center for X-ray Optics, Lawrence Berkeley National Laboratory  

**Design of soft x-ray grating having enhanced diffraction efficiency for detecting trace born at 183 eV**  

## P-2  
Toshiki Hirotomo¹, Takahisa Koyama¹, Shigeki Konishi², Satoshi Ichimaru⁴, Tadayuki Ohchi⁴, Hisataka Takenaka⁵, Hidekazu Takano¹, Yoshiyuki Tsusaka¹, and Yasushi Kagoshima¹  

1 Center for Novel Material Science under Multi-Extreme Condition Graduate School of Material Science, University of Hyogo  
2 Japan Synchrotron Radiation Research Institute (JASRI/SPRING-8)  
3 NTT Advanced Technology Corporation, TOYAMA Corporation  

**Fabrication and evaluation of multilayer zone plate for hard X-ray focusing**  

## P-3  
Yoshio Suzuki¹, Akihisa Takeuchi¹, Yasuko Terada¹, Kentaro Uesugi¹, Shigeru Tamura²  

1 Japan Synchrotron Radiation Research Institute (JASRI), SPRING-8  
2 AIST Kansai, National Institute of Advanced Industrial Science and Technology  

**Development of large-field high-resolution hard x-ray imaging microscopy and microtomography with Fresnel zone plate objective**  

## P-4  
Kenji Sakka, Toshiki Hirotomo, Kazuhiro Sumida, Atsuyuki Matsumura, Hidekazu Takano, Yoshiyuki Tsusaka and Yasushi Kagoshima  

Center for Novel Material Science under Multi-Extreme Condition Graduate School of Material Science, University of Hyogo  

**Development of focused hard X-ray beam lithography for PMMA photoresist**  

## P-5  
Hiroshi Nakajima¹, Ryō Nagino¹, Masayuki Sasaki¹, Shota Inoue¹, Shota Inoue¹, Shuhei Katada¹, Naohisa Anabuki¹, Kyoshi Hayashida¹, Hiroshi Tsunemi¹, Masanobu Oza³, Chikara Natsuka¹, Tadayasu Dotani², John P. Doty³  

1 Osaka University  
2 JAXA/ISAS  
3 Noqsi Aerospace Ltd.  

**Screening of the flight model CCDs for Soft X-ray Imager (SXI) onboard ASTRO-H**  

## P-6  
Shota Inoue¹, Hiroshi Nakajima¹, Masaki Hasegawa¹, Masayuki Sasaki¹, Hiroshi Tsunemi¹, Kyoshi Hayashida¹, Naohisa Anabuki¹, Hirokazu Ikeda¹  

1 Department of Earth and Space Science, Graduate School of Science, Osaka University  
2 National Institute of Radiological Science (NIRS)  

**Development and performance evaluation of readout ASIC for onboard CCD cameras**  

## P-7  
Ryo Nagino¹, Hiroshi Nakajima¹, Masaaki Hasegawa¹, Masayuki Sasaki¹, Hiroshi Tsunemi¹, Kyoshi Hayashida¹, Naohisa Anabuki¹, Hirokazu Ikeda¹  

1 Department of Earth and Space Science, Graduate School of Science, Osaka University  
2 Noqsi Aerospace Ltd.  
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**Development and performance evaluation of readout ASIC for onboard CCD cameras**  

## P-8  
Shota Inoue¹, Hiroshi Nakajima¹, Ryō Nagino¹, Naohisa Anabuki¹, Hiroyuki Hayashida¹, Hiroshi Tsunemi¹, John P. Doty³  

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2 JAXA/ISAS  
3 ISAS/JAXA  

**Development and performance evaluation of readout ASIC for onboard CCD cameras**
P-9 Keigo Yoshinaga, Kiyoshi Hayashida, Masaaki Sadamoto, Fumiyoshi Kamitsukasa, Hiroshi Tsunemi, Naohisa Anabuki, Shuichi Gunji, Mitsunari Sakano, Jun Katagiri, Tateyuki Nakamori, Tatehiro Mihara, Juri Sugimoto, Toshihiro Takagi, Yuji Kishimoto, Daisuke Yonetoku, Tsunefumi Mizuno, Hiromitsu Takahashi, Yoichi Yatsu, Hidetoshi Kubo, and PolariS-WG

1 Osaka University, 2 Yamagata University, 3 RIKEN, 4 KEK, 5 Kanazawa University, 6 Hiroshima University, 7 Tokyo Inst. of Tech, 8 Kyoto University

Scattering Imaging Polarimeter (SIP) for the X-ray Gamma-ray Polarimetry Satellite PolariS (I) Design and Background Rejection

P-10 Masaaki Sadamoto, Kiyoshi Hayashida, Keigo Yoshinaga, Fumiyoshi Kamitsukasa, Hiroshi Tsunemi, Naohisa Anabuki, Shuichi Gunji, Mitsunari Sakano, Jun Katagiri, Tateyuki Nakamori, Tatehiro Mihara, Juri Sugimoto, Toshihiro Takagi, Yuji Kishimoto, Daisuke Yonetoku, Tsunefumi Mizuno, Hiromitsu Takahashi, Yoichi Yatsu, Hidetoshi Kubo, and PolariS-WG

1 Osaka Univ., 2 Yamagata Univ., 3 RIKEN, 4 KEK, 5 Kanazawa Univ., 6 Hiroshima Univ., 7 Tokyo Inst. of Tech, 8 Kyoto Univ.

Scattering Imaging Polarimeter for the X-ray Gamma-ray Polarimetry Satellite “PolariS” Performance Test and Simulation

P-11 Yoji Emi, Satoshi Matsuyama, Hidetoshi Kinc, Yoshide Kohnur, Tetsuya Ishikawa, and KazutoYamauchi

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2 RIKEN/SPRING-8

Development of a High-resolution Full-field Hard X-ray Imaging Microscope with Compact AKB Mirror Optics

P-12 Shuhei katada, Kiyoshi Hayashida, Hiroshi Nakajima, Ryo Nagoine, Naohisa Anabuki, Hiroshi Tunemi, Masayuki Sasaki, Shuto Ueda, Shota Inoue, Takayoshi Kohtmaru, Kenta Kaneko, Tadayasu Dotani, Masanobu Otsak, Hiroshi Tomida, Masaharu Izawa, Keisuke Kondo, Takeshi Go Tsuru, Takaaki Tanaka, Hiroyuki Uchida, Masayoshi NobeKawa, Takao Ohnishi, Hiroshi Murakami, Koji Mor, and the ASTRO-H SXI team

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Soft X-ray Response of the Soft X-ray Imager onboard ASTRO-H


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4 Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
5 The Hakubi Center for Advanced Research, Kyoto University
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9 Department of Physics and Mathematics, Aoyama Gakuin University
10 Nasaqi Aerospace, Ltd. (United States)

Development of Soft X-ray Imaging (SXI) onboard ASTRO-H satellite

P-14 Norio Watanabe, Masashi Yamaguchi, Yuji Tsuburaya, Akiohiro Shimada and Sadao Aoki

Division of Applied Physics, Faculty of Pure and Applied Science, University of Tsukuba

Differential phase-contrast microscope with Foucault knife-edge scanning
P-15  Satoru Egawa, Takehiro Kume, Hidekazu Mimura
Department of Precision Engineering, Graduate School of Engineering, The University of Tokyo
Electrodeposition Conditions in Ni Electroforming for Fabrication of Soft X-ray Ellipsoidal Focusing Mirrors

P-16  Makoto Sasanō1, Junko S. Hiraga2, Kazuo Makishima1,2
1 Department of Physics, School of Science, The University of Tokyo
2 Research Center for the Early Universe, Graduate School of science, The University of Tokyo
X-ray photon detection with a newly developed CMOS image sensor

P-17  Takuji Ohigashi1,2, Yuichi Inagaki1, Kenji Hayashi3, Naonori Kondo1, Masahiro Saka1, Eiji Shigemasa2,3, Atsushi Ito1,3, Nobuhiro Kosugi1,2 and Masahiro Katoh1,2
1 UVSOR Facility, Institute for Molecular Science
2 The Graduate University for Advanced Studies (SOKENDAI)
3 Department of Nuclear Engineering, Tokai University
Current status of STXM beamline at UVSOR

P-18  Takuji Ohigashi1,2, Yuichi Inagaki1, Kenji Hayashi2, Naonori Kondo1, Masahiro Saka1, Eiji Shigemasa2,3, Atsushi Ito1,3, Nobuhiro Kosugi1,2 and Masahiro Katoh1,2
1 UVSOR Facility, Institute for Molecular Science
2 The Graduate University for Advanced Studies (SOKENDAI)
3 Department of Nuclear Engineering, Tokai University
X-ray γ-ray Polarimetry Small Satellite PolariS

P-19  Matsumoto, H.1, Miyata, Y.2, Furuzawa, A.3, Ishida, N.4, Furuta, H.5, Yamamoto, Y.6, and Kunieda, H.5
1 Center for Experimental Studies, Kobayashi-Maskawa Institute (KMI), Nagoya University
2 Department of Physics, Graduate School of Science, Nagoya University
3 Institute of Liberal Arts and Sciences, Nagoya University
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X-ray γ-ray Polarimetry Small Satellite PolariS

1 Department of Earth and Space Science, Graduate School of Science, Osaka University
2 Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency
3 Department of Applied Physics, Faculty of Engineering, University of Miyazaki
Development of digital electronics for Soft X-ray Imager (SXI) onboard ASTRO-H satellite

P-21  Hiroaki Yoshida1, Naohisa Anabuki1, Ryō Nagino1, Hiroshi Nakajima1, Hiroshi Tsunemi1, Masanobu Ozaki2, Keisuke Kondo2, Hirokazu Odaka2 and Takaaki Tanaka2
1 Osaka University,
2 Institute of Space and Astronautical Science,
3 Kyoto University
Development of the Monte Carlo simulation framework for the FFAST/SDCCD

P-22  Ryo Iizuka1,2, Yohko Tsuboi2, Kohta Okada2, Takashi Awaya2 and Takanori Izumiya2
1 Department of Astro-H Project Team, The Institute of Space and Astronautical Science, JAXA
2 Department of Physics, Faculty of Science and Engineering, Chuo University
Development of a bent Si crystal for X-ray imaging polarimetry

P-23  Takeo Watanabe, Kazuya Emura, Tsubasa Fukui, Hirohito Tanino, Masato Yamaguchi, Masaki Kuki, Testuo Harada, and Hiroo Kinoshita
Center for EUVL, Laboratory of Advanced Science and Technology for Industry, University of Hyogo,
EUV Interference lithography for the development of the EUV resist for 1x nm node

P-24  Y. Furudate1,2, A. Saito1,2, H. Miki1,2, Y. Kusui1,2, T. Tanaka1,2, Y. Takagi3, Y. Tanaka2, Y. Kohmura2, M. Akai-Kasaya1, T. Ishikawa4, Y. Kuwahara2,3, and M. Aono4
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2 RIKEN SPring-8 Center
3 Institute for Molecular Science
4 National Institute for Materials Science
Nanoscale elemental identification using Synchrotron-Radiation-based STM –STS spectra under X-ray irradiation-
P-25  A Hidetoshi Kino¹, Satoshi Matsuyama¹, Yoji Emi¹, Hiromi Okada¹, Yasuhsa Sano¹ and Kazuto Yamauchi¹
¹ Department of Precision Science and Technology, Graduate School of Engineering, Osaka University
Development of one-dimensional Wolter mirror figured on a single substrate for full-field X-ray microscop

P-26 Yoshinori Takei, Takahiro Saito, Takehiro Kume, Takahiro Hirata and Hidekazu Mimura
Department of Precision Engineering, Graduate School of Engineering, The University of Tokyo
Development of manufacturing process for soft X-ray ellipsoidal mirrors

P-27 Ryosuke Fukui¹, Jangwoo Kim¹, Satoshi Matsuyama¹, Hirokatsu Yumoto², Yuichi Inubushi³, Kensuke Tono², Takahisa Koyama², Takashi Kimura⁴, Hidekazu Mimura⁵, Haruhiko Ohashi², Makina Yabashi³, Tetsuya Ishikawa³ and Kazuto Yamauchi¹,⁶
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⁴ Research Institute for Electronic Science, Hokkaido University
⁵ Japan Synchrotron Radiation Research Institute
⁶ Research Center for Ultra-Precision Science and Technology, Graduate School of Engineering, Osaka University
Single-shot wavefront measurement of XFEL nanobeam

P-28 Hiroki Nakamori¹, Satoshi Matsuyama¹, Takumi Goto¹, Takashi Kimura², Yasuhsa Sano¹, Yoshiki Kohmura², Kenji Tamasaku², Makina Yabashi³, Tetsuya Ishikawa³ and Kazuto Yamauchi¹,⁴
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Two-dimensional X-ray nanofocusing using piezoelectric deformable mirrors