

【General Session】

April 11 (Thu) PACIFICO YOKOHAMA Conference Center 418

1. Photon/Electron Therapy 1 (4DRT/Real Time) 13:00–14:00 Moderator: Yuki Miyabe

- 0-001 A study of three dimensional tracking method for organ motion on two cross-sectional ultrasound images
Gunma University Yoshiki Kubota
- 0-002 Real-time tumor-tracking radiotherapy system with mono X-ray fluoroscopy
Hokkaido University Naoki Miyamoto
- 0-003 Development of a real time motion image prediction system with ROI selection for lung tumor tracking in radiation therapy
The University of Tokyo Ritu Bhusal Chhatkuli
- 0-004 Impact of respiratory motion on dose profile during VIRTUAL WEDGE delivery
Osaka University Nobuhide Wakai
- 0-005 Investigation of well-balanced kV x-ray imaging condition between skin dose and noise for dynamic tumor-tracking irradiation in Vero4DRT
Institute of Biomedical Research and Innovation Takahiro Nakai
- 0-006 Mechanical accuracy of dynamic tumor-tracking during arc irradiation with gimbaled x-ray head
Kyoto University Tomohiro Ono

2. Photon/Electron Therapy 2 (CBCT) 14:00–14:50 Moderator: Akihiro Takemura

- 0-007 Time-ordered four dimensional Cone-Beam CT
The University of Tokyo Masahiro Nakano
- 0-008 Accuracy evaluation of Atlas-based Auto-Segmentation software in cone-beam CT image
Fujimoto Hayasuzu Hospital Hidemi Kamezawa
- 0-009 Basic study of 4D CBCT reconstruction using the detection of the target position from 2D projection images.
Tokai University Hospital Keisuke Usui
- 0-010 Evaluation for 4 dimensional reconstruction of a cone beam CT on a linac with a dynamical tracking system
Juntendo University Satoru Sugimoto
- 0-011 Improvement of 4D Cone-beam CT image quality with iterative reconstruction
The University of Tokyo Satoshi Kida

3. Photon/Electron Therapy 3 (CBCT/Dose Calculation) 15:00–16:00 Moderator: Kunihiro Tateoka

- 0-012 Dose calculation using in-treatment 4D kilovoltageCBCT and in-treatment linac parameters during VMAT for a lung tumor
The University of Tokyo Hospital Akira Sakumi
- 0-013 Monte Carlo calculation of patient dose distributions from kV-cone beam CT for image-guided radiation therapy
Kumamoto University Kazunari Hioki
- 0-014 Monte Carlo dose verification of intensity modulated radiation therapy based on MATLAB
Kumamoto University Yuuki Tomiyama
- 0-015 Measurement of dose evaluation indices using cone-beam CT for prostate IMRT
Kyushu University Hospital Taka-Aki Hirose
- 0-016 Study of conversion of energy subtracted CT number to electron density using dual energy CT
Niigata University Masayoshi Tsukihara

- 0-017 Electron density measurement with dual energy CT for radiation treatment planning: comparison of projection-based versus image-based virtual monochromatic imaging

Kobe Medical Cancer Center Toshiyuki Ogata

4. Photon/Electron Therapy 4 (QA/QC1)

16:00–17:10

Moderator: Iori Sumida

- 0-018 Fundamental study for scanning methods in IMRT verification using Gafchromic EBT3

Institute of Biomedical Research and Innovation Kazuki Kubo

- 0-019 Evaluation of an independent monitor unit calculation software for intensity modulated radiation therapy

Kanagawa Cancer Center Kenji Shioiri

- 0-020 Evaluation of the accuracy of IMRT QA using 3DVH software

Tohoku University Makoto Ogasawara

- 0-021 Creating a daily personal dose management software that can be visually evaluated in IMRT using the MLC Log File

Tama-Hokubu Medical Center Kazunori Watanabe

- 0-022 Characteristic examination of the detector in the verification of VMAT for Prostate with dose distribution.

Seirei Hamamatsu General Hospital Yuta Muraki

- 0-023 Basic characteristic comparison of the COMPASS and the MatriXX Evolution

Kagoshima University Medical and Dental Hospital Masahiko Toyota

- 0-024 Usability of the high-precision measuring instrument to manage the radiation beam of the high-precision radiotherapy equipment

Yokohama CyberKnife Center Mitsuhiro Inoue

5. Diagnostic 1	13:00–13:40	Moderator: Hidetake Hara
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5. Diagnostic 1	13:00–13:40	Moderator: Hidetake Hara
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0-026 Analysis of phase contrast using transmission-type x-ray source and flat panel detector
Fujita Health University Ai Ikeya

0-027 Extraction of obstacles in panoramic x-ray images with a tomosynthesis method Hosei University Junpei Yamamoto

0-028 3D kinematic estimation of temporomandibular joint using X-ray fluoroscopic images
MEI Center Osaka University Takaharu Yamazaki

0-029 Simple noninvasive approach to assess gantry rotation time: Relation between the accuracy and detector position
Shiga Medical Center for Children Atsushi Fukuda

0-030	Study on influence of scattered radiation in ADCT	Hokkaido University Hospital	Michiaki Yamashita
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0-031 The Characteristic of a Dose to Head Region in Dual Source CT
Kitasato University Hidetake Hara

0-032 Withdrawn

0-033 Measurement of linear attenuation coefficients with a photon counting CT Hosei University Mariko Matsumoto

0-034	80 kcps energy-dispersive X-ray CT system utilizing a CdTe detector and a comparator	Iwate Medical University Hospital	Yuichi Sato
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0-035	Dark-count-less photon-counting X-ray CT system using a YAP(Ce)-MPPC detector	Iwate Medical University	Yasuyuki Oda
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0-036	Energy-dispersive CT system with a Si-PIN X-ray diode and its application to gadolinium K-edge imaging	Iwate Medical University	Eiichi Sato
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0-037 High-sensitivity CT system using a direct-conversion Si-PIN X-ray diode and its application to gadolinium K-edge imaging

		Iwate Medical University	Eiichi Sato
0-038	Development of an LSO-MPPC spectrometer and its applications high-speed energy-dispersive X-ray CT system	Iwate Medical University	Eiichi Sato

0-039 Histogram analysis of 3D cerebral cortical thicknesses on MR images for diagnosis of Alzheimer's disease
Kyusyu University Hospital Chiaki Tokunaga

0-040	Noise-mapping of cerebral infarction CT image obtained in head CT examination with organ-based tube current modulation system	Nagoya University	Chiyo Yamauchi-Kawaura
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- 0-041 Let's consider sensory rating of the vision assessment methods of X-ray examination. Thurstone's Paired Comparison and Scheffe's Paired Comparison

Ureshino Medical Center Yukio Inoue

- 0-042 Investigation of image property in AIDR3D

Hokkaido University Hospital Michiaki Yamashita

- 0-043 Reconstruction of CT images with projection data including missing parts

Hosei University Futoshi Kaibuki

9. Radiation Protection

16:30–17:00

Moderator: Hiroki Ohtani

- 0-044 A study on a real-time x-ray entrance dose monitoring system in interventional radiology using Microsoft Kinects

Kyushu University Kenta Kozono

- 0-045 X-ray detector for real-time dose monitoring in interventional radiology

National Institute of Radiological Sciences Fumihiko Nishikido

- 0-046 Antioxidant effect of transglycosylated rutin for irradiated CHO cell

The University of Tokyo Shigeaki Sunada

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10. Photon/Electron Therapy 5 (QA/QC2) 9:00–10:00 Moderator: Shimpei Hashimoto

- 0-047 Energy Spectrum Inference of clinical photon beam by use of PDD
Teikyo University Jun'ichi Kotoku
- 0-048 Comparison between multiple facilities of depth dose, off-axis ratio and output factor using high-energy photon radiotherapy
Iwata City Hospital Tomohiro Shimozato
- 0-049 Progress of TPS-QC supporting program by a third-party evaluation agency
National Cancer Center Kyohei Fukata
- 0-050 Function as an independent quality assurance for designated regional cancer centers
National Cancer Center Toshiyuki Minemura
- 0-051 Effectiveness of on-site IMRT measurements by a third party organization: An important role of third party evaluation
Ryukyu University Yasumasa Kakinohana
- 0-052 Verification of the fundamental data about the polymer gel dosimeter for evaluating the pelvic organ dose in brachytherapy
National Institute of Radiological Sciences Kuniaki Nabatame

11. Photon/Electron Therapy 6 (QA/QC3) 10:00–11:00 Moderator: Suguru Dobashi

- 0-053 The characteristics of EPID for in-vivo dosimetry
The Tokyo University Hospital Naoya Saotome
- 0-054 Analysis of post-irradiation growth effect for development of dose verification technique using a radiochromic film
Okayama University Takuya Tsunehiro
- 0-055 Examination of measurement of irradiation field by difference of measurement modality
Iwate prefectural Isawa hospital Koji Ishita
- 0-056 Clearance simulation of Gamma Knife radiosurgery with Leksell skull frame
Nagoya Kyoritsu Hospital Hisato Nakazawa
- 0-057 Development of a collision detection simulator among treatment apparatus for radiotherapy treatment planning
Kyoto College of Medical Science Akira Sawada
- 0-058 Patient Collision Simulator for Non-coplanar Stereotactic Body Radiation Therapy
Washington University Akito Saito

12. Photon/Electron Therapy 7 (VMAT) 14:40–15:50 Moderator: Akira Sakumi

- 0-059 To Acquire Tumor Position in Thorax Lesion accompany with Breathing Movement Using EPID Images
Cancer Institute Hospital Satoko Saotome
- 0-060 Verification of MLC motion during RapidArc delivery by use of an in-house program
Fujita Health University Yumiko Adachi
- 0-061 Verification of irradiation parameters on VMAT for head and neck cancer
Seirei Hamamatsu General Hospital Ryuichi Yada
- 0-062 Dose reconstruction for moving targets in VMAT
The Cancer Institute Hospital Masatoshi Hashimoto
- 0-063 Impact of MLC position errors for VMAT dose distributions
Tottori University Hospital Yasushi Ono
- 0-064 Independent verification of dynamic machine parameters for VMAT QA using DICOM-RT
Hyogo College of Medicine Hideharu Miura

- 0-180 [Invited Speaker] Implementation of EPIQA portal dosimetry software for volumetric modulated arc therapy pre-treatment QA

Chulalongkorn University, Thailand Chitchaya Suwanraksa

13. Photon/Electron Therapy 8 (Monte Carlo)

15:50–17:00

Moderator: Satoshi Kito

- 0-065 Reduction of the number of remapped respiratory phase images in four-dimensional Monte Carlo dose calculation of dynamic tumor tracking irradiation

Kyoto University Yoshitomo Ishihara

- 0-066 The Effect of The Scatters from the physical wedge filter on the surface dose out of the field

Nagoya University Maiko Niwa

- 0-067 The study of expansion of irradiation field size for IMRT technique vero4DRT gimbal mechanism of radiation therapy equipment

Tokai University Shigeto Kabuki

- 0-068 [Invited Speaker] MONTE CARLO SIMULATION OF ABSORBED DOSE FROM LINAC ON CT PHANTOM VOXEL BY USING MCNP5 CODE IN CASE OF BRAIN TUMOUR

University of Science, VNU-HCMC, Vietnam Nguyen Thi Cam Thu

- 0-069 Dosimetric perturbation due to scattered rays released by a gold marker used for prostate tracking in multiple field radiotherapy

Hiroshima Red Cross Hospital & Atomic-Bomb Survivors Hospital Kosaku Habara

- 0-070 Verification of beam degrader in TSET by GEANT4

Keio University Natsumi Futakami

- 0-071 Dose assessment by the water absorbed dose dosimetry phantom of the Ir-192 brachytherapy source

Kawasaki College of Allied Health Professions Naomasa Narihiro

14. Radiation Measurement 1 (Application of Monte Carlo)

17:00–17:50

Moderator: Masao Matsumoto

- 0-072 Monte Carlo-calculated patient organ doses from a diagnostic X-ray CT

Kumamoto University Takeshi Ohno

- 0-073 Material decomposition with a photon counting CT

Hosei University Takeshi Maji

- 0-074 Calculation and evaluation of beam quality correction factor for a parallel-plate chamber by using Monte Carlo with EGS5/PHITS codes

Osaka University Masao Matsumoto

- 0-075 [Invited Speaker] Study on dose rate distribution surrounding to diagnostic X ray facilities and estimate the influence of scattering effect from the shieldings by MCNP5 code

University of Science, VNU-HCM, Vietnam Truong Thi Hong Loan

- 0-076 A Improvement Method for EPID Images using Electron Mode of Linear Accelerator

Tokyo Metropolitan University Atsushi Myojoyama

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15. Particle Therapy 1 (BNCT) 9:00–10:30 Moderator: Shunsuke Yonai

- 0-077 Status Report of Aizawa Hospital Proton Therapy center Project Part1
Aizawa Hospital Proton Therapy Center Isamu Maeshima
- 0-078 Present Status of the SAGA-HIMAT Project
SAGA-HIMAT Foundation Mitsutaka Kanazawa
- 0-079 Status Report of Aizawa Hospital Proton Therapy Center Project Part2
Aizawa Hospital Proton Therapy Center Yuya Sugama
- 0-080 Beam property of Double-decker compact proton therapy system
Sumitomo Heavy Industries, Ltd. Daizo Amano
- 0-081 Proton beam tuning for the breast cancer treatment at the Medipolis Proton Therapy and Research Center
Medipolis Proton Therapy and Research Center, Ibusuki City Yuya Toi
- 0-082 Respiratory Rate and Synchrotron Pattern Cycle Dependence of Treatment Time
Medipolis Medical Research Institute Naoaki Kondo
- 0-083 Improving Efficiency of Proton Therapy by Utilizing a Rotating Gantry Port as a Horizontal Fixed Port
Medipolis Medical Research Institute Naoaki Kondo
- 0-084 Status of the Development of Acc-Based BNCT Irradiation System at a Down Town Hospital
Kyoto University Research Reactor Institute Tooru Kobayashi
- 0-085 Dose Estimation for Internal Organs in Body-trunk BNCT
Kyoto University Research Reactor Institute Yoshinori Sakurai

16. Particle Therapy 2 (PET) 14:40–15:50 Moderator: Teiji Nishio

- 0-086 Study of fragmentation reaction in the body for proton therapy
Rikkyo University Keiichiro Matsushita
- 0-087 Washout effect in RI beam irradiation of rat using small OpenPET
National Institute of Radiological Sciences Yoshiyuki Hirano
- 0-088 Clinical application of autoactivated PET-CT after Carbon Ion therapy in G.H.M.C.
Gunma University Hospital Takayoshi Ishii
- 0-089 The PET-based tumor tracking with error reduction method
Chiba University Tetsuya Shinaji
- 0-090 In-Beam Imaging Test of a Small Prototype for the Second Generation OpenPET
National Institute of Radiological Sciences Taiga Yamaya
- 0-091 Estimation of standard deviation of range in 3-D irradiation by using Fisher's Information
Tokyo Institute of Technology Yasunori Nakajima
- 0-092 A Monte Carlo simulation of real-time tumor tracking by the OpenPET: a feasibility study
National Institute of Radiological Sciences Hideaki Tashima

17. Particle Therapy 3 (QA/Measurement) 15:50–17:00 Moderator: Mutsumi Tashiro

- 0-093 Dose Measurement Program in Quality Assurance for Broad Beam Therapy at HIMAC
National Institute of Radiological Sciences Manabu Mizota
- 0-094 The positional accuracy of robotic arm treatment bed using Micrometer Drive
National Cancer Center Hospital East Tsunemichi Akita
- 0-095 Evaluation of the phantom for cone-beam CT to create CT number-linear stopping power ratio conversion table for proton treatment
Tokyo Metropolitan University Ryuta Hirai

- 0-096 Examination of the daily QA method of the isocenter positions in In-room CT and orthogonal DR
National Cancer Center Hospital East Tatsuya Mogaki
- 0-097 Development of the Phantom Based on ROI Information in Radiotherapy Planning
Fukui Prefectural Hospital Makoto Sasaki
- 0-098 Derivation of the lateral beam spread with concentric electrode ionization chamber in heavy-ion therapy
National Institute of Radiological Sciences Yousuke Hara
- 0-099 Measurement of field size dependence of radiation quality of carbon beams using silicon detector.
Gunma University Tatsuaki Kanai

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18. Nuclear Medicine

9:10-9:50

Moderator: Hiroshi Watabe

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| 0-100 | Simulation study of an axially extendable multiplex cylinder PET | National Institute of Radiological Sciences | Eiji Yoshida |
| 0-101 | Monte-Carlo simulation of sensitivity and NECR of a 2m-long PET scanner | Tokyo Institute of Technology | Ismet Isnaini |
| 0-102 | Accuracy of Attenuation Coefficients with Dual Energy Virtual Monochromatic Imaging for SPECT Attenuation Correction | Osaka University Hospital | Takashi Ueguchi |
| 0-103 | The Performance Evaluation of The Electron Tracking Compton Camera | Kyoto University | Shinya Sonoda |

19. Nuclear Medicine/MRI

10:00–10:50

Moderator: Toru Yamamoto

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|-------|--|---|------------------|
| 0-104 | Development of an integrated PET/MRI detector: Evaluation of magnetic-field distortion caused by eddy-current in shield boxes | Chiba University | Kodai Shimizu |
| 0-105 | Vascular properties obtained from spin-echo signal fluctuations in the human brain | Hokkaido University | Minghui Tang |
| 0-106 | Development of a DOI-PET detector "X'tal cube": optimal position calculation for each optical condition in the scintillation crystal block | National Institute of Radiological Sciences | Naoko Inadama |
| 0-107 | Performance of laser-processed X'tal cube PET detectors with reduced the numbers of SiPM readout surfaces | National Institute of Radiological Sciences | Yoshiyuki Hirano |
| 0-108 | Optical simulation of a novel DOI detector with a stack of planer scintillators : Impact of surface roughness on spatial resolution | Chiba University | Akane Gondo |

20. Photon/Electron Therapy 9 (Treatment Planning)

14:40–15:50

Moderator: Kazunori Miyaura

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| 0-109 | The Potential of Virtual Non-Contrast CT for Radiotherapy Treatment Planning | Osaka University Hospital | Sachiko Yamada |
| 0-110 | Development of an Open Source Platform for adaptive radiotherapy | Teikyo University | Shinobu Kumagai |
| 0-111 | [Invited Speaker] The Evaluation of Respiratory Errors and Breast Shape Changes from Set-up Errors on Tangential Whole Breast Irradiation | The Catholic University of Korea,Korea | Seu-Ran Lee |
| 0-112 | Intrafractional prostate motion using fiducial gold markers in hypofractionated IMRT | Kitasato University Hospital | Minoru Ishigami |
| 0-113 | The evaluation of dose accumulation in replanning during the course of intensity modulated radiotherapy in head and neck region | Osaka University | Masao Matsumoto |
| 0-114 | Study of treatment planning with split field technique in IMRT | Gunma University Heavy Ion Medical Center | Motohiro Kawashima |
| 0-115 | Evaluation method of cumulative dose of organs at risk in head and neck IMRT using deformable image registration | Tohoku University | Kazuhiro Arai |

21. Photon/Electron Therapy 10 (Treatment Support) 15:50–17:10 Moderator: Hiroyuki Okamoto

- 0-116 Optimization method of beam directions based on similar cases in stereotactic body radiotherapy for lung cancers
Kyushu University Taiki Magome
- 0-117 Computer-Aided Delineation of Lung Tumor Regions in Treatment Planning CT Images by Localized Level Set Method Combined with PET/CT Images
Kyushu University Ze Jin
- 0-118 Automated method for monitoring of patient positioning during treatment time based on range images acquired from time-of-flight camera
Kyushu University Mazen Soufi
- 0-119 Actual method of SBRT for lung cancer in Ogaki Municipal Hospital
Ogaki Municipal Hospital Hitoshi Takagi
- 0-120 Development of three-dimensional summation method for rectal doses combined with seed implant brachytherapy and external beam radiotherapy for prostate cancer
Iwate Medical University Satoshi Yamaguchi
- 0-121 Which is better for Patient?
Otsu Red Cross Hospital Makoto Hirata
- 0-122 Examination of the preliminary-treatment way of the bladder at prostate IMRT
Hitachinaka General Hospital Yoshiyuki Kawasaki
- 0-181 [Invited Speaker] Magnetic Resonance Imaging Based Treatment Planning for Brain tumor
Chulalongkorn University, Thailand Kittipol Dachaworakul

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22. Particle Therapy 4 (Scanning)

9:00–10:40

Moderator: Takeji Sakae

- 0-123 Measurement of neutron ambient dose equivalent in carbon-ion radiotherapy with active scanned beam
National Institute of Radiological Sciences Shunsuke Yonai
- 0-124 Dependence of dose distortion on the scanning direction in proton beam therapy for a respiratorily moving target
University of Tsukuba Hospital Satoshi Kamizawa
- 0-125 Commissioning of moving target irradiation with scanned-ion beam
National Institute of Radiological Sciences Takuji Furukawa
- 0-126 Proposal of Intensity Modulated Composite Ion Therapy (IMCIT)
National Institute of Radiological Sciences Taku Inaniwa
- 0-127 Development of IMPT optimization algorithm for proton therapy with fiducial markers
Hitachi Research Laboratory Rintaro Fujimoto
- 0-128 Beam Technology and Its Stability Verification for Scanning Delivery at NIRS-HIMAC
National Institute of Radiological Sciences Kota Mizushima
- 0-129 Report of a biological experiment with scanning beam in GHMC
Gunma University Heavy-Ion Medical Center Eri Takeshita
- 0-130 Systematic evaluation of four-dimensional hybrid depth scanning for carbon-ion lung therapy
National Institute of Radiological Sciences Shinichiro Mori
- 0-131 A study on a gated proton spot-scanning beam therapy integrated with a real-time tumor-monitoring: an initial phantom study using patient tumor trajectory data
Hokkaido University Taeko Matsuura
- 0-132 A comparative study of dose distribution in proton spot scanning and that in patch irradiation
University of Tsukuba Shohei Mizutani

23. Particle Therapy 5 (Simulation)

14:40–15:40

Moderator: Toshiyuki Toshito

- 0-133 Evaluation of impurity components of secondary particles generated in particle therapy equipment
Osaka University Keita Kurosu
- 0-134 Nuclear Reaction Data for Particle Therapy
Osaka University Takuma Horaguchi
- 0-135 Study of proton therapy simulation included effect of secondary particle generated in nuclear reaction
Rikkyo University Seiichi Tamaki
- 0-136 A clinical use of Monte Carlo simulation in Nagoya Proton Therapy Center
Nagoya Proton Therapy Center Chihiro Omachi
- 0-137 Development of Monte-Carlo dose calculation system based on the XiO[®]-N treatment planning system at Fukui prefectural hospital proton therapy center
Fukui Prefectural Hospital Proton Therapy Center Yoshikazu Maeda
- 0-138 Monte Carlo study on reduction in the secondary neutron exposure in passive carbon-ion radiotherapy
Nagoya University Akihiko Takeuchi

24. Particle Therapy 6 (Equipment, Treatment Planing)

15:50–17:00

Moderator: Toshiyuki Terunuma

- 0-139 Treatment planning for scanned charged particle beams - Finding an optimal 4DCT resolution
National Institute of Radiological Sciences Silvan Zenklusen
- 0-140 Development of IMPT optimization algorithm for reducing sensitivity to range uncertainties in heterogeneous media
Hitachi Research Laboratory Shusuke Hirayama

- 0-141 Development of an in-house program to calculate the monitor unit for proton therapy beam.
Fujita Health University Naoki Hayashi
- 0-142 Experimental verification of effectiveness of bolus designed using the dose-optimization method
University of Tsukuba Yoshihisa Takada
- 0-143 A study on simultaneous optimization of boluses for broad beam patch irradiation in proton therapy
University of Tsukuba Ryo Yachidate
- 0-144 Evaluation of range compensation materials for carbon ion therapy
National Institute of Radiological Sciences Yusuke Koba
- 0-145 Secondary particle components in carbon-ion beam related to range shifter position
Osaka University Keita Kurosu

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25. Photon/Electron Therapy 11 (Positioning) 9:00–10:10 Moderator: Mitsuhiro Nakamura

- 0-146 The evaluation of intra-fractional organ motion error and intra-fractional setup error in radiation therapy for lung cancer with breath-holding
Aizawa Hospital Proton Therapy Center Yuya Sugama
- 0-147 Registration accuracy for lung tumor verified by using in-treatment 4D cone-beam CT
The University of Tokyo Hospital Akihiro Haga
- 0-148 Study of radiation treatment planning considering the lung function using 4D-CT ventilation imaging
Tohoku University Sang Yong Cho
- 0-149 [Invited Speaker] Improvement in accuracy of respiratory gated radiation therapy using respiratory guiding system
The Catholic University of Korea, Korea Seong-Hee Kang
- 0-150 Development of a deformable lung phantom for quantitatively verifying deformation algorithms
Tohoku University Yusuke Onozato
- 0-151 Study of CT value on CBCT for Adaptive Radiation Therapy
University of Tsukuba Hospital Tatsuya Segawa
- 0-152 Development of support software for verifying accuracy of the lung tumor tracking system
Yokohama CyberKnife Center Mitsuhiro Inoue

26. Photon/Electron Therapy 12 (Brachytherapy) 10:10–11:00 Moderator: Toshiyuki Ogata

- 0-153 Micro-focus X-ray imaging of I-125 brachytherapy sources for QC
Kitasato University Tomoyuki Hasegawa
- 0-154 Development of strength evaluation method of moving sources for brachytherapy (3) Influence by source position and shield by needles
Sapporo Medical University Kenichi Tanaka
- 0-155 Three-dimensional dose distribution of Ruthenium 106 brachytherapy for retinoblastoma
The University of Tokyo Hospital Masahiko Futaguchi
- 0-156 Reconstruction accuracy of CT/MR applicator for cervix cancer brachytherapy: comparing manual and library modelling in CT imaging
University of the Ryukyus Hussein ALMasri
- 0-157 Evaluation of the possibilities of predicting urinary and rectal damage after permanent seed implant
Fujita Health University Hospital Yasunori Saito

27. Particle Therapy 7 (Others) 11:00–11:50 Moderator: Nobuyuki Kanematsu

- 0-158 The evaluation of 4D dose distribution used 4DCT for respiratory gated layer-stacking liver treatment.
National Institute of Radiological Sciences Minoru Nakao
- 0-159 Design of beam specific target volume for particle therapy using fiducial marker
Nagoya Proton Therapy Center Toshiyuki Toshito
- 0-160 Investigation of the range uncertainty in treatment planning caused by imaging with CT simulator
Nagoya City West Medical Center Hiroki Shibata
- 0-161 Development of dynamic tumor locating system for accurate proton irradiation
Rikkyo University Ryouta Noguchi
- 0-162 Development and verification of Bragg Peak locating system in patient body by proton irradiation
Rikkyo University Tatsuhiko Suzuki

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- 0-163 LET Dependency of Glow Curve of Tissue Equivalent Phantom Thermoluminescence Dosimeter (TEP-TLD)
Chiba University Satoshi Tamatsu
- 0-164 Usefulness of TL Slab detector of central position detection for CyberKnife Beam
Tokyo Metropolitan University Daiki Maruyama
- 0-165 Characteristics of tissue-equivalent Thermoluminescence and Photoluminescence films
Juntendo University Chie Kurokawa
- 0-166 Investigation of VIPAR polymer gel dosimeter for dosimetric verification in the carbon ion beam therapy (2)
Nishina Center for Accelerator-Based Science, RIKEN Takuya Maeyama
- 0-167 Application of a polyacrylamide gel detector for dose measurements in a proton beam
Hiroshima International University Takahiro Tominaga
- 0-168 The Study of direct calibration on the polymer gel detector's dose response by Gafchromic films
Hiroshima International University Mitsutoshi Tada
- 0-169 Report on the short-term study abroad to RMIT University
Hiroshima International University Satomi Nakahara

29. Radiation Measurement 3 (Babble, Scintillator, GM) 10:10–11:10 Moderator: Akihiro Nohtomi

- 0-170 Development of a real-time dose measurement tool with a plastic scintillator for radiation therapy
Kitasato University Katsunori Yogo
- 0-171 Development of 4-D dosimetry tool using plastic scintillator
Rikkyo University Seiichi Tamaki
- 0-172 Development of a leak survey meter
Iwate Medical University Michiaki Sagae
- 0-173 Application of a superheated drop detector for the estimation of biological effectiveness for C-ion RT
Yokohama City University Osamu Yamamoto
- 0-174 High sensitive neutron-detection by an NaI scintillator (1) — Measurement at a research reactor
Kyushu University Akihiro Nohtomi
- 0-175 High sensitive neutron-detection by an NaI scintillator (2) — Measurement at a clinical linac
Kyushu University Eriko Yahiro

30. Radiation Measurement 4 (QA, Standard) 11:10–11:50 Moderator: Tadahiro Kurosawa

- 0-176 A feasibility study for efficient daily routine using an EPID
University of the Ryukyus Akira Funyu
- 0-177 Development of XiO beam database
Elekta Japan K.K. Kazuyuki Wada
- 0-178 Absorbed dose standard for high-energy photons from a clinical linac
National Metrology Institute of Japan Morihito Shimizu
- 0-179 Dosimeter Calibration with Water Absorbed Dose by ANTM
Dose Calibration Center, Association for Nuclear Technology in Medicine Suoh Sakata