

Registration ID	Presentation			Session			
	No.	Title	Language	Title	Date	Time slot	Room
10000	O-06	Development of a high-spatial-resolution CT scanner using a white-power LED	Japanese	Miscellaneous	April 14 (Thu.)	15:00-15:50	418
10001	IC-97	Evaluation of dose distributions for the layer-stacking conformal irradiation under internal anatomical structural changes	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10002	O-36	Efficient automated patient specific quality assurance using log files and a commercial treatment planning system in proton pencil beam scanning	Japanese	Quality assurance	April 17 (Sun.)	14:10-15:00	418
10003	IC-21	Development of a geometric physical phantom for CT to CBCT deformable image registration.	English	Radiotherapy: Imaging	April 15 (Fri.)	10:10-11:00	502
10004	O-01	Detection of Infarct Foci by Model-Based Iterative Reconstruction in CT Using a Novel Phantom Model of Stroke	Japanese	Diagnostic technology	April 14 (Thu.)	14:00-14:50	418
10005	O-32	Verification for skin markerless in Tomotherapy using body surface laser scanning system	Japanese	Motion and deformation	April 17 (Sun.)	11:10-12:00	418
10006	IC-30	Development of deep learning-based dose distribution prediction framework using multi-region-based 3D Hierarchically Densely Connected U-Net	English	Radiotherapy: Deep learning	April 15 (Fri.)	16:20-17:00	502
10007	IC-98	Development of beam axis correction method with position feedback system	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10008	O-37	Dosimetric evaluation of log-based simplified Monte Carlo dose calculation for efficient patient-specific QA in spot-scanning proton therapy	Japanese	Quality assurance	April 17 (Sun.)	14:10-15:00	418
10009	O-29	Discrimination of the infiltration of lung adenocarcinoma in computed tomography image using homology method	Japanese	Machine learning	April 15 (Fri.)	18:00-18:50	418
10010	O-13	Evaluation of dose uncertainty in polymer gel dosimetry associated with temperature and transportation	Japanese	Radiation measurement	April 14 (Thu.)	16:00-17:00	418
10011	IC-53	Development of a compact non-invasive detector for high dose-rate >192 Ir source movement	English	Radiation measurement and detector	April 16 (Sat.)	10:00-10:50	502
10012	IC-34	Combining clinical data with CT image in deep learning for outcome prediction of oropharyngeal cancer recurrence	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
10013	IC-104	Optical imaging of dose distribution by >10 B(n, α) >7 Li reaction using boron-added liquid scintillator for boron neutron capture therapy	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10014	O-11	Attempt of dose evaluation considering ionizing structure by image analysis of charged particle tracks	Japanese	Radiation measurement	April 14 (Thu.)	16:00-17:00	418
10015	O-26	Dosimetric comparison of helical tomotherapy and HyperArc treatment plans in angiosarcoma of the scalp	Japanese	Photon therapy	April 15 (Fri.)	10:50-11:50	418
10016	IC-33	Prediction of Short-Term Prognosis of CCU Patients Using Visualizable CNN in ECG Images	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
10017	IC-76	Evaluation of dose equivalent by secondary neutrons generated by head proton therapy	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10018	IC-51	Plastic scintillation dosimeter with a conical mirror for measuring 4D dose distribution	English	Radiation measurement and detector	April 16 (Sat.)	10:00-10:50	502
10019	IC-54	Detection of elevated pulmonary arterial wedge pressure using chest X-ray image by convolutional neural network	English	Diagnostic technology-2	April 16 (Sat.)	13:10-14:00	502
10020	O-23	Prediction of lung dose in radiotherapy of stage III lung cancer using SUV values of PET/CT images	Japanese	Photon therapy	April 15 (Fri.)	10:50-11:50	418
10021	IC-46	Lead shield with ARM optimization effectively suppress mandible dose in HDR brachytherapy for tongue cancer	English	Radiotherapy: Planning	April 16 (Sat.)	9:00-9:50	502
10022	IC-45	Radiobiological evaluation considering the treatment time with CyberKnife stereotactic radiosurgery for brain metastases	English	Radiotherapy: Planning	April 16 (Sat.)	9:00-9:50	502
10023	O-07	Evaluation of weighted CT reconstruction for ill-posed problem	Japanese	Miscellaneous	April 14 (Thu.)	15:00-15:50	418
10024	IC-70	Prediction of cell survival using track-structure Monte Carlo simulation	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10025	O-31	The position variation between fiducial marker and tumor according to respiratory motion of 250 patients treated by CyberKnife	Japanese	Motion and deformation	April 17 (Sun.)	11:10-12:00	418
10026	IC-32	Development of Prediction Model for Head and Neck Volume Reduction by Clinical Factors and Radionomics in Head and Neck Cancer	English	Radiotherapy: Deep learning	April 15 (Fri.)	16:20-17:00	502
10027	IC-105	Development of fast neutron detection method discriminating gamma-ray events with single ionization chamber in BNCT field	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10028	O-25	The impact of MLC positional errors on radiobiological metrics in volumetric-modulated radiation therapy	Japanese	Photon therapy	April 15 (Fri.)	10:50-11:50	418
10029	O-15	The simulation of Electron beam (Elekta Versa HD) in magnetic field	Japanese	Monte Carlo	April 15 (Fri.)	9:00-9:50	418
10030	IC-10	Study of CT-based thermometry for visualizing the human body on thermal resolution	English	Diagnostic technology-1	April 15 (Fri.)	8:00-9:00	502

10031	IC-99	Reduction of detector misalignment errors in ionoacoustic range detection by using a miniature laser interferometer hydrophone	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10032	O-12	A study on the relationship between dose rate and counting when a UVC camera is used as a semiconductor detector	Japanese	Radiation measurement	April 14 (Thu.)	16:00-17:00	418
10033	IC-39	Monte carlo simulation on Electron return effect for breast cancer in MRIdian Linac treatment	English	Quality assurance	April 16 (Sat.)	8:00-8:50	502
10034	O-30	A Noble Quality Control and Identification Method for Human Keratinocyte Stem Cells by Automated Cell Tracking	Japanese	Machine learning	April 15 (Fri.)	18:00-18:50	418
10035	IC-74	Verification of complementary approach using full-energy Monte Carlo method and partial model-based method for fast dose calculation in BNCT	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10036	IC-106	Examination on dose-rate dependence of water luminescence for irradiation of therapeutic carbon-ion at lower energy than Cerenkov-light threshold	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10037	IC-101	Range uncertainties for MRI-only treatment planning with convolutional neural network in particle therapy	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10038	O-20	Clinical commissioning of the RayStation treatment planning system for carbon-ion beam scanning irradiation at East Japan Heavy Ion Center	Japanese	Particle therapy	April 15 (Fri.)	9:55-10:45	418
10039	IC-67	Reduction of sub-lethal damage repair effect in spot-scanning proton therapy: An attempt to use the intensity modulation	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10040	IC-11	Development of dynamic x-ray elastography using laboratory x-ray source and synchrotron radiation for soft tissues and soft materials	English	Diagnostic technology-1	April 15 (Fri.)	8:00-9:00	502
10041	IC-40	The control of electron beams using yoke and cavity iron core solenoids	English	Quality assurance	April 16 (Sat.)	8:00-8:50	502
10042	IC-22	Novel scattered X-ray model for cone-beam computed tomography	English	Radiotherapy: Imaging	April 15 (Fri.)	10:10-11:00	502
10043	IC-37	Radiomic classification of severity caused by coronavirus disease 2019 pneumonia based on CT images	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
10044	IC-68	Treatment Planning on Carbon Ion Radiotherapy for Prostate Cancer Based on Cellular Experiments of PC3 Human Prostate Cancer Cell Line	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10045	O-08	Questionnaire survey on medical physics education and medical physics training system in Japan for researchers and students under 35-year-old	Japanese	Miscellaneous	April 14 (Thu.)	15:00-15:50	418
10046	O-28	Automatic Segmentation of Brain Metastases Using a Platform for Deep Learning Model Development in Medical Imaging	Japanese	Machine learning	April 15 (Fri.)	18:00-18:50	418
10047	IC-75	Comprehensive evaluation of dosimetric impact against setup errors in accelerator-based BNCT with different treatment parameter settings	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10048	O-34	Real-time volumetric imaging based on CT image deformation driven by displacement of internal fiducial markers in abdominal region	Japanese	Motion and deformation	April 17 (Sun.)	11:10-12:00	418
10050	IC-23	A generative cone-beam computed tomography model	English	Radiotherapy: Imaging	April 15 (Fri.)	10:10-11:00	502
10051	O-35	Examination of transition from 3D detector system to In vivo dosimetry verification in intensity-modulated radiotherapy dose distribution verification	Japanese	Quality assurance	April 17 (Sun.)	14:10-15:00	418
10052	O-09	X-ray-dose-rate measurement using an ionization diode	Japanese	Radiation measurement	April 14 (Thu.)	16:00-17:00	418
10053	O-05	Antibacterial effect of titanium-oxide particles under white-photon irradiation	Japanese	Miscellaneous	April 14 (Thu.)	15:00-15:50	418
10054	IC-71	Study on the improvement of neutron distribution by overlapping of irradiation fields using intensity modulators in accelerator-based BNCT	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10055	O-10	Dosimetric Characterization of Two-Dimensional Liquid-Filled Ionization Chambers Used for Quality Assurance in Stereotactic Radio Surgery	Japanese	Radiation measurement	April 14 (Thu.)	16:00-17:00	418
10056	O-22	Comparison of rectal-dose reduction ability between a hydrogel spacer and a hyaluronic acid gel spacer in HDR prostate brachytherapy	Japanese	Photon therapy	April 15 (Fri.)	10:50-11:50	418
10057	O-33	Deformable Image Registration between arm positions (raised/down) PET-CT and Treatment Planning CT Images	Japanese	Motion and deformation	April 17 (Sun.)	11:10-12:00	418
10058	IC-44	Effect of Slice Thickness on Estimating Lung Volume in Lung Resection Analysis by Phantoms	English	Radiotherapy: Planning	April 16 (Sat.)	9:00-9:50	502
10059	O-24	Robustness assessment of VMAT plan with robust optimization for prostate radiotherapy	Japanese	Photon therapy	April 15 (Fri.)	10:50-11:50	418
10060	O-02	Evaluation of chronic smoking effect on cerebral arteriolar vasomotor function in young subjects using MRI	Japanese	Diagnostic technology	April 14 (Thu.)	14:00-14:50	418
10061	IC-25	Exploring the re-planning protocol to manage inter-fractional organ movement during a course of intensity modulated radiation therapy for cervical cancer	English	Radiotherapy: Imaging	April 15 (Fri.)	10:10-11:00	502
10062	IC-107	Luminescence imaging of water irradiated by protons under FLASH radiation therapy conditions	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10063	IC-43	Development of independent dose calculation system for a second-check dose calculation for spot scanning proton therapy	English	Quality assurance	April 16 (Sat.)	8:00-8:50	502

10064	IC-73	Commissioning of a treatment planning system used for clinical BNCT and validation against an independent Monte Carlo dose calculation system	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10065	IC-72	Design, verification, and application of a filtration system to improve the dose distribution of an accelerator-based neutron capture therapy system	English	BNCT and neutron dosimetry	April 16 (Sat.)	16:30-17:30	502
10066	IC-38	Automated Detection of Gastric Polyps from Endoscopic Images Using U-net	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
10067	O-38	Development of a Patient QA System Using Independent Beam Models and Irradiation Log Files for Heavy Ion Therapy	Japanese	Quality assurance	April 17 (Sun.)	14:10-15:00	418
10068	IC-52	Evaluation of detection accuracy for moving objects with a infrared depth camera	English	Radiation measurement and detector	April 16 (Sat.)	10:00-10:50	502
10069	IC-35	Prediction of Time Variant Trajectory of Lung Tumor Growth during TKI Targeted Therapy	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
10070	IC-103	Prompt gamma imaging in BNCT using a Compton camera	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10071	IC-48	Construction of backup solutions for patients who treat with Elekta Unity using Fallback planning module of RayStation	English	Radiotherapy: Planning	April 16 (Sat.)	9:00-9:50	502
10072	IC-47	Validity of two robust radiobiological optimization algorithms based on the mixed beam model for intensity modulated carbon-ion therapy	English	Radiotherapy: Planning	April 16 (Sat.)	9:00-9:50	502
10073	O-19	Fundamental performance evaluation of treatment planning system for boron neutron capture therapy	Japanese	Particle therapy	April 15 (Fri.)	9:55-10:45	418
10074	IC-69	Establishing the commissioning system for verifying the clinical dose of Intensity Modulated Ion Therapy	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10075	IC-100	A Study on Evaluation Method of Proton Pencil Beam Irradiation Position Accuracy Using Self-Activated Image Information	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10076	O-21	Effect of Dose Heterogeneity on Cell Killing Effect in Carbon Ion Radiotherapy	Japanese	Particle therapy	April 15 (Fri.)	9:55-10:45	418
10077	IC-102	Establishment of evaluation method for fragmentation model in heavy ion therapy energy	English	Particle therapy: Simulation and experiment	April 17 (Sun.)	14:00-15:00	502
10078	IC-41	Development of Stoichiometric calibration method for MVCT to MD table on Tomotherapy	English	Quality assurance	April 16 (Sat.)	8:00-8:50	502
10079	IC-65	The effect of high dose-rate irradiation on cell survival : simple investigation with the cultured cells	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10080	IC-42	Evaluation of a New Independent Dose Verification Software SciMoCa for Prostate and Head and Neck Cancer Plans with Helical TomoTherapy	English	Quality assurance	April 16 (Sat.)	8:00-8:50	502
10081	IC-24	Comparison of the matching accuracy between 5 different deformable image registration algorithms	English	Radiotherapy: Imaging	April 15 (Fri.)	10:10-11:00	502
10082	IC-108	The perturbation factor of plane-parallel chamber to Scanning proton beams: A monte carlo study	English	Particle therapy: Imaging and measurement	April 17 (Sun.)	15:10-16:10	502
10083	O-04	Validation of electromagnetic simulation of SAR using homogenous spheres with analytically-obtained theoretical values	Japanese	Diagnostic technology	April 14 (Thu.)	14:00-14:50	418
10084	IC-78	Concept and clinical impact of an intraoperative forceps-type coincidence detector for intraoperative lymph node diagnosis using FDG	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
10085	O-27	Generation of Pseudo-CT using GAN-based model with contrastive learning on pelvic MRI data	Japanese	Machine learning	April 15 (Fri.)	18:00-18:50	418
10086	O-17	Denoising Monte Carlo dose distribution using deep learning	Japanese	Monte Carlo	April 15 (Fri.)	9:00-9:50	418
10087	O-16	A comparative study of Geant4 and EGS5 for image quality improvement by using scattered radiation in portal imaging system	Japanese	Monte Carlo	April 15 (Fri.)	9:00-9:50	418
10088	O-18	Analyzing spatial distribution between 18F-Fluorodeoxyglucose and 18F- Boronophenylalanine PET for investigating selection indicators for boron neutron capture therapy	Japanese	Particle therapy	April 15 (Fri.)	9:55-10:45	418
10089	IC-79	CLS-PET: a high-resolution portable small-animal PET with a 20 cm axial FOV	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
10090	IC-80	Development of a TOF helmet-type PET scatter correction method with image-domain interpolation and subtraction	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
10091	IC-66	Optimization of irradiation interval for fractionated stereotactic radiotherapy by an in-silico cell model	English	Biology: Dosimetry and simulation	April 16 (Sat.)	15:20-16:20	502
10092	IC-81	Performance comparison of offline PET systems for visualization of a heavy-ion microbeam	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
10093	IC-77	Fast analytical PET simulation toward in vivo range monitoring for scanned proton beam	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
10094	O-03	Voxel size dependence of MRI metallic artifacts in ultrashort echo time imaging	Japanese	Diagnostic technology	April 14 (Thu.)	14:00-14:50	418
10095	O-14	Investigation of dose distribution in heterogeneous materials for a ^{192}Ir source by Monte Carlo Simulation	Japanese	Monte Carlo	April 15 (Fri.)	9:00-9:50	418

10096	IC-82	Experimental assessment of completeness condition for WGI Compton image reconstruction	English	Nuclear medicine-1	April 17 (Sun.)	8:00-9:00	502
20001	IC-36	A Radiogenomic Signature for Prediction of Lung Cancer Prognosis: Association Between HOPX Gene Expression and CT Image Features	English	Image informatics: Prediction	April 15 (Fri.)	17:10-18:00	502
20002	IC-31	Feasibility study of deep learning-based markerless real-time tumor tracking for patients with lung cancer	English	Radiotherapy: Deep learning	April 15 (Fri.)	16:20-17:00	502