Reg. No.	Program No.	Session title	Presentation title	Room	Date	Start	End	Style
20035	TPI-001	Radiation Measurement: Radiotherapy	Development of remote-operating neutron spectrometer for QA in BNCT irradiation field	502	April 10	10:30	11:10	Oral
20059	TPI-002	Radiation Measurement: Radiotherapy	Microscintillator for dosimetry of proton microbeam	502	April 10	10:30	11:10	Oral
20060	TPI-003	Radiation Measurement: Radiotherapy	Evaluation of maximum measurable dose rate of a plastic scintillator detector for FLASH carbon ion beam dosimetry	502	April 10	10:30	11:10	Oral
20144	TPI-004	Radiation Measurement: Radiotherapy	Development and demonstration of a radiation-resistant dual-layer hybrid dose distribution detector utilizing Cherenkov and scintillator light	502	April 10	10:30	11:10	Oral
20001	TPI-005	Radiation Measurement: Imaging	A novel algorithm for generating virtual high-contrast images based on X-ray attenuation analysis using an energy-resolving photon-counting detector	502	April 10	11:20	12:10	Oral
20061	TPI-006	Radiation Measurement: Imaging	Organ dose measurement for filament material-based head and neck coronal 3D-printed phantom with dosimetry and Monte Carlo code	502	April 10	11:20	12:10	Oral
20073	TPI-007	Radiation Measurement: Imaging	Novel procedure to derive relationship between surface and internal doses taking into consideration X-ray incident direction during helical CT examinations	502	April 10	11:20	12:10	Oral
20114	TPI-008	Radiation Measurement: Imaging	Visualization of scattered radiation sources during X-ray CT examinations using a high-sensitivity CMOS camera	502	April 10	11:20	12:10	Oral
20140	TPI-009	Radiation Measurement: Imaging	Generating parallel optical path in in-air readout optical computed tomography	502	April 10	11:20	12:10	Oral
20012	TPI-010	Image Informatics: Prediction	Machine learning approaches for kidney diagnostics using SPECT imaging	Withdrawn				
20083	TPI-011	Image Informatics: Prediction	Novel mathematical models for tumor growth trajectories in breast cancer patients during neoadjuvant chemotherapy	502	April 10	13:30	14:20	Oral
20135	TPI-012	Image Informatics: Prediction	Estimation of age using alveolar bone loss with integrating deep learning for identity recognition and biological aging analysis	502	April 10	13:30	14:20	Oral
20099	TPI-013	Image Informatics: Prediction	ResNet-based exposure index (EI) prediction model using chest radiographs: A single institution study	502	April 10	13:30	14:20	Oral
20048	TPI-014	Image Informatics: Prediction	Deep learning based automatic body weight estimation from postmortem computed tomography scout views	502	April 10	13:30	14:20	Oral
20025	TPI-015	Image Informatics: Segmentation	TAILOR-TS system: tailored tumor segmentation system with facility-specific semi-supervised learning	502	April 10	14:30	15:40	Oral
20064	TPI-016	Image Informatics: Segmentation	Automatic segmentation of large gross tumor volumes based on hierarchical vision transformer model for radiotherapy patients with stage III NSCLC	502	April 10	14:30	15:40	Oral
20086	TPI-017	Image Informatics: Segmentation	Efficient deep learning segmentation model with small training dataset for three-dimensional automatic measurement of gross tumor volume diameters of lung cancer on planning CT images	502	April 10	14:30	15:40	Oral
20131	TPI-018	Image Informatics: Segmentation	Development of deep learning-based dental implant segmentation model and analysis of panoramic image preprocessing effects	502	April 10	14:30	15:40	Oral
20132	TPI-019	Image Informatics: Segmentation	Development of a PCA-based post-processing algorithm for individual teeth segmentation in dental X-ray images	502	April 10	14:30	15:40	Oral
20134	TPI-020	Image Informatics: Segmentation	Automatic alveolar bone loss segmentation model on panoramic dental radiograph images	502	April 10	14:30	15:40	Oral
20136	TPI-021	Image Informatics: Segmentation	Deep learning model for multi-class alveolar bone loss semantic segmentation on panoramic dental radiograph images	502	April 10	14:30	15:40	Oral
20007	TPI-022	Radiation Protection: CT	Evaluation of recognition and utilization level for national diagnostic reference levels	502	April 10	15:50	16:20	Oral
20008	TPI-023	Radiation Protection: CT	Evaluation of effective dose on dental cone-beam CT using PC based Monte Carlo simulation	502	April 10	15:50	16:20	Oral
20111	TPI-024	Radiation Protection: CT	Monte Carlo simulation-based calculation of conversion factor for effective dose using Korean national computed tomography dose index registry	502	April 10	15:50	16:20	Oral
20019	TPI-025	X-ray and Others	Study on anode heel effect in digital radiography system	419	April 10	10:30	11:30	Oral
20043	TPI-026	X-ray and Others	The effect of grid focus distance on chest posterior radiography using an automatic exposure control system	419	April 10	10:30	11:30	Oral
20068	TPI-027	X-ray and Others	Hindfoot alignment view versus long axial radiographic view	419	April 10	10:30	11:30	Oral
20009	TPI-028	X-ray and Others	Cross calibration analysis of dual-energy X-ray absorptiometry on the same model bone densitometry system	419	April 10	10:30	11:30	Oral
20077	TPI-029	X-ray and Others	Comparison of international standards for quality control in digital breast imaging systems: a focus on Korea, Japan, and the United States	419	April 10	10:30	11:30	Oral
20118	TPI-030	X-ray and Others	Fundamental study on optimal contrast media concentration in CBCT after WEB implantation for cerebral aneurysm	419	April 10	10:30	11:30	Oral
20017	TPI-031	Radiation Protection: Occupational Exposure	Distribution measurement of spatial dose by position of medical staff in intervention procedure	502	April 11	8:00	8:40	Oral
20129	TPI-032	Radiation Protection: Occupational Exposure	Development of radiation protection educational material by augmented reality during angiography with user's opinion	502	April 11	8:00	8:40	Oral
20130	TPI-033	Radiation Protection: Occupational Exposure	Real-time imaging of scattered radiation sources during X-ray fluoroscopy using a portable radiation visualization camera	502	April 11	8:00	8:40	Oral
20137	TPI-034	Radiation Protection: Occupational Exposure	Investigate the contribution of scattered radiation from each source at the operator's position using Monte Carlo simulation	502	April 11	8:00	8:40	Oral
20004	TPI-035	Radiomics	Improvement of normalization of MRI to estimate pathological grade of prostate cancer by local radiomics	502	April 11	8:50	10:00	Oral
20011	TPI-036	Radiomics	Automated approach for the stratification of stroke patients based on radiomic features	Withdrawn				
20040	TPI-037	Radiomics	Noninvasive detection of EGFR gene mutations using electron density images from dual-energy CT	502	April 11	8:50	10:00	Oral
20082	TPI-038	Radiomics	N-dimensional persistent homology for identification models of epidermal growth factor receptor mutation characterized on CT images of patients with non-small cell lung cancer	502	April 11	8:50	10:00	Oral
20097	TPI-039	Radiomics	Evaluation of robustness of MR-based prediction models of epidermal growth factor receptor mutations in metastatic brain tumors using coefficient of variation	502	April 11	8:50	10:00	Oral

20138	TPI-040	Radiomics	Evaluation of conventional and PCA-based feature selection method of multi-omics prediction model for radiation pneumonitis in NSCLC Stage III patient	502	April 11	8:50	10:00	Oral
20069	TPI-041	Radiomics	Interpretation of survival predictors by CT-based radiogenomics for serous ovarian cancer	502	April 11	8:50	10:00	Oral
20002	TPI-042	Nuclear Medicine: Performance Evaluation	Facilitating CT dose reduction for patients undergoing serial SPECT/CT imaging during ^{177}Lu DOTATATE therapy	502	April 11	10:10	11:00	Oral
20021	TPI-043	Nuclear Medicine: Performance Evaluation	Evaluation of PET image change according to CT attenuation map of various pitch conditions	502	April 11	10:10	11:00	Oral
20109	TPI-044	Nuclear Medicine: Performance Evaluation	Impact of ^{89}Zr decay properties on image quality and quantitative accuracy in PET	502	April 11	10:10	11:00	Oral
20079	TPI-045	Nuclear Medicine: Performance Evaluation	Comparative evaluation of image indicators by PET/CT equipment	502	April 11	10:10	11:00	Oral
20143	TPI-046	Nuclear Medicine: Performance Evaluation	Performance evaluation of Mirai-PET: a high-resolution and large FOV small animal PET with TOF-DOI detection	502	April 11	10:10	11:00	Oral
20116	TPI-047	Particle Therapy	Measurement method using acrylic phantom for quality assurance of BNCT procedure	502	April 11	15:30	16:20	Oral
20089	TPI-048	Particle Therapy	Feasibility study of spot scanning by MeV electron beam convergence control using electromagnets	502	April 11	15:30	16:20	Oral
20022	TPI-049	Particle Therapy	Conceptual design of a static gantry system	502	April 11	15:30	16:20	Oral
20066	TPI-050	Particle Therapy	Focal dose-averaged linear energy transfer boost for prostate carbon-ion radiotherapy: a planning study	502	April 11	15:30	16:20	Oral
20106	TPI-051	Particle Therapy	Dosimetry benefits of adaptive radiotherapy in carbon ion radiotherapy for locally advanced non-small cell lung cancer: a comparative analysis of tumor coverage and normal tissue protection	502	April 11	15:30	16:20	Oral
20026	TPI-052	Particle Therapy: Biophysics	The appropriateness of the linear-quadratic model in predicting hypofractionated radiotherapy dose response for photon and proton irradiation	502	April 11	16:30	17:10	Oral
20047	TPI-053	Particle Therapy: Biophysics	Relative biological effectiveness (RBE) study at different depths of proton spread-out Bragg peak	Withdrawn				
20103	TPI-054	Particle Therapy: Biophysics	Exploration of the role and mechanism of proton beams in radiotherapy-resistant cells	502	April 11	16:30	17:10	Oral
20104	TPI-055	Particle Therapy: Biophysics	Normal tissue complication probability model for acute oral mucositis in patients with head and neck cancer undergoing carbon ion radiation therapy: based on dosimetry, radiomics, and dosiomics	502	April 11	16:30	17:10	Oral
20055	TPI-056	Novel Technology	Blockchain enhanced particle radiotherapy: a cross-platform secure data sharing platform for particle radiotherapy scenario	502	April 11	17:20	18:00	Oral
20070	TPI-057	Novel Technology	Patient setup guide using AR technology for radiation therapy	502	April 11	17:20	18:00	Oral
20098	TPI-058	Novel Technology	Micro-CT assessment of *Nostoc commune* extract's biological effects on osteoporosis models	502	April 11	17:20	18:00	Oral
20125	TPI-059	Novel Technology	Impact of long-term step trajectories on weight loss	502	April 11	17:20	18:00	Oral
20003	TPI-060	Clinical Technique	Discussion on the value of image fusion based on artificial intelligence	419	April 11	8:00	8:50	Oral
20031	TPI-061	Clinical Technique	A review on alternatives for sedation in children's MRI: systematic approach	419	April 11	8:00	8:50	Oral
20062	TPI-062	Clinical Technique	Characteristics of patients with allergy-like reactions to iodinated contrast media undergoing computed tomography at a super-tertiary care hospital	419	April 11	8:00	8:50	Oral
20075	TPI-063	Clinical Technique	Innovative use of shared decision-making and patient decision aids to enhance treatment selection for chronic low back pain	419	April 11	8:00	8:50	Oral
20094	TPI-064	Clinical Technique	Evaluation of adverse reactions and trends in contrast agent use in CT imaging: a single-center data development study	419	April 11	8:00	8:50	Oral
20108	TPI-065	MR: Analysis and Technique	Fast brain perfusion quantification using second-order motion-compensated diffusion imaging with phase-contrast	502	April 12	8:00	9:10	Oral
20018	TPI-066	MR: Analysis and Technique	Magnetic resonance imaging on metal artifacts a comparative study of 2D, 3D images	502	April 12	8:00	9:10	Oral
20006	TPI-067	MR: Analysis and Technique	Assessment of vascular endothelial injury in rat models of unilateral carotid artery injury using 4D-flow MRI	502	April 12	8:00	9:10	Oral
20124	TPI-068	MR: Analysis and Technique	Short-term changes in volumes, T_2, and diffusion parameters of tumor and peritumoral edema after embolization in supratentorial meningioma	502	April 12	8:00	9:10	Oral
20033	TPI-069	MR: Analysis and Technique	Development of diagnostic support software for intracerebral hemorrhage detection and elapsed time estimation using multi-sequence magnetic resonance images	502	April 12	8:00	9:10	Oral
20080	TPI-070	MR: Analysis and Technique	Compare MRI cardiac scanning in China and Japan	502	April 12	8:00	9:10	Oral
20067	TPI-071	MR: Analysis and Technique	Preventing abnormal safety events in MRI examinations using the HFMEA method	502	April 12	8:00	9:10	Oral
20013	TPI-072	Radiation Protection: X-ray	Evaluating organ-specific radiation doses in neonatal incubator X-ray procedures using Monte Carlo simulation	502	April 12	9:20	10:20	Oral
20016	TPI-073	Radiation Protection: X-ray	A study of the minimization of exposure conditions during AP and lateral imaging of the lumbar spine in a digital radiography system	502	April 12	9:20	10:20	Oral
20058	TPI-074	Radiation Protection: X-ray	Effectiveness of radiation dose optimization on patient radiation dose obtained from traumatic carotid-cavernous fistula endovascular treatment.	502	April 12	9:20	10:20	Oral
20074	TPI-075	Radiation Protection: X-ray	Assessment of radiation dose and factors influencing it in mammography: a single-center study	502	April 12	9:20	10:20	Oral
20095	TPI-076	Radiation Protection: X-ray	Evaluating the suitability of exposure index as a patient dose monitoring tool in portable abdominal radiography	502	April 12	9:20	10:20	Oral
20115	TPI-077	Radiation Protection: X-ray	Comparison of doses for custom-made phantoms and acrylic phantoms with varying thicknesses in breast stereotactic biopsy	502	April 12	9:20	10:20	Oral
20020	TPI-078	Photon Therapy: Irradiation Technology	A study on the dose distribution of photoneutrons according to the patient's treatment direction in radiation therapy	502	April 12	13:10	14:00	Oral
20096	TPI-079	Photon Therapy: Irradiation Technology	Comparative evaluation of organ dose and image quality in kilovoltage CBCT imaging systems on an O-ring linear accelerator	502	April 12	13:10	14:00	Oral

20041	TPI-080	Photon Therapy: Irradiation Technology	Target position estimation based on diaphragm motion using respiratory-phase-adjusted variable offset vectors for markerless tumor tracking radiotherapy	502	April 12	13:10	14:00	Oral
20133	TPI-081	Photon Therapy: Irradiation Technology	Respiratory reproducibility evaluation of a surface motion phantom for SGRT	502	April 12	13:10	14:00	Oral
20092	TPI-082	Photon Therapy: Irradiation Technology	Evaluation of optimal rigid body registration algorithms for portable body surface monitoring devices	502	April 12	13:10	14:00	Oral
20105	TPI-083	Photon Therapy: Biophysics	Radiotherapy resistance of Hsa_circ_0000337 and its encoded proteins in esophageal squamous carcinoma cells	502	April 12	14:10	14:40	Oral
20036	TPI-084	Photon Therapy: Biophysics	The radiotherapeutic technology proposal aimed at its optimization for hepatocellular carcinoma using biomarkers	502	April 12	14:10	14:40	Oral
20139	TPI-085	Photon Therapy: Biophysics	Tumor-specific circRNA-derived antigen peptide identification for esophageal squamous cell carcinoma	Withdrawn				
20087	TPI-086	Brachytherapy and Others	Calibration of high-dose rate brachytherapy source (iridium-192) using well-type ionization chamber and high-dose-rate remote afterloading brachytherapy machine	502	April 12	14:50	15:20	Oral
20088	TPI-087	Brachytherapy and Others	Verification and calculation of shielding for 50 kVp high-dose rate (HDR) electronic brachytherapy commissioned at Gonoshasthaya cancer hospital and research centre	502	April 12	14:50	15:20	Oral
20126	TPI-088	Brachytherapy and Others	Development of an AI chatbot for radiotherapy using retrieval-augmented generation	502	April 12	14:50	15:20	Oral
20024	TPI-089	Image Informatics: Generative AI	Conditional diffusion model-based image transformation of MR sequences in MR-guided radiotherapy	502	April 12	15:30	16:30	Oral
20028	TPI-090	Image Informatics: Generative AI	In-house automatic evaluation of artificial intelligence image reconstruction algorithms in CT	502	April 12	15:30	16:30	Oral
20091	TPI-091	Image Informatics: Generative AI	Development of deep learning-based diaphragm suppression technique through in-silico approach	502	April 12	15:30	16:30	Oral
20117	TPI-092	Image Informatics: Generative AI	Image quality enhancement of small FOV cone-beam CT by using a generative model	502	April 12	15:30	16:30	Oral
20030	TPI-093	Image Informatics: Generative AI	Generation of lung nodule images from image findings using latent diffusion model	502	April 12	15:30	16:30	Oral
20065	TPI-094	Image Informatics: Generative AI	Multi-task scheme for image findings generation and classification in chest CT: a comparative study of image captioning models	502	April 12	15:30	16:30	Oral
20023	TPI-095	Image Informatics: Detection	Initial investigation of triple negative detection in breast MR images using a multi-slice multi-phase vision transformer	502	April 12	16:40	17:20	Oral
20029	TPI-096	Image Informatics: Detection	Preliminary study on an automated detection scheme for pediatric forearm fractures in X-ray images using Open CLIP	502	April 12	16:40	17:20	Oral
20119	TPI-097	Image Informatics: Detection	Evaluation of deep learning-based segmentation models for cerebral hemorrhage detection in postmortem computed tomography	502	April 12	16:40	17:20	Oral
20128	TPI-098	Image Informatics: Detection	Classification of postmortem computed tomography images for cerebral hemorrhage detection using deep learning	502	April 12	16:40	17:20	Oral
20045	TPI-099	CT: Analysis and Others	Radiation dose reduction accelerated with deep learning reconstruction for temporal bone regions in ultra-high-resolution CT imaging	502	April 13	8:00	9:00	Oral
20014	TPI-100	CT: Analysis and Others	CT channel by using 3D modeling phantom evaluation of the usefulness of the wide detector	502	April 13	8:00	9:00	Oral
20085	TPI-101	CT: Analysis and Others	Comparison of commercially available statistical iterative CT reconstruction algorithms from different vendors for performance evaluation of low-contrast detectability in pediatric brain protocols: a phantom study	502	April 13	8:00	9:00	Oral
20093	TPI-102	CT: Analysis and Others	Application of virtual monochromatic images in quantitative computed tomography to reduce the measurement error of bone mineral density: a phantom study	502	April 13	8:00	9:00	Oral
20044	TPI-103	CT: Analysis and Others	Prediction of CT tube service life based on tube filament	502	April 13	8:00	9:00	Oral
20063	TPI-104	CT: Analysis and Others	Exploring radiographers' divergent approaches to infection prevention and control in CT: a think-aloud study	502	April 13	8:00	9:00	Oral
20005	TPI-105	CT: Technique and Clinical Application	Feasibility of protocol optimization for CT coronary angiography using a commercial pulsating cardiac phantom	502	April 13	9:10	10:00	Oral
20027	TPI-106	CT: Technique and Clinical Application	Effective atomic number score in calcified plaque evaluation: approach using photon-counting CT	502	April 13	9:10	10:00	Oral
20034	TPI-107	CT: Technique and Clinical Application	The correlation between the Hounsfield unit and bone mineral density to predict osteoporosis in patients	502	April 13	9:10	10:00	Oral
20145	TPI-108	CT: Technique and Clinical Application	Differentiation of tumor budding grade of colon cancer using noise-optimized virtual monoenergetic image in dual-energy computed tomography	Withdrawn				
20146	TPI-109	CT: Technique and Clinical Application	Differentiation of malignant grade of non-mucinous pulmonary adenocarcinomas in subsolid nodules using enhanced dual-energy computed tomography	Withdrawn				
20049	TPI-110	Radiation Protection: Radiotherapy and Nuclear Medicine	The absorption dose and secondary tumor risk induced by different imaging methods in image-guided radiotherapy	502	April 13	10:10	10:40	Oral
20076	TPI-111	Radiation Protection: Radiotherapy and Nuclear Medicine	Study of calculating shielding wall thickness in Cyclotron room	502	April 13	10:10	10:40	Oral
20122	TPI-112	Radiation Protection: Radiotherapy and Nuclear Medicine	Comparative dosimetry study of PARaDIM with ICRP Publication 128: calculation of organ and effective doses from 18F-FDG radiopharmaceutical	502	April 13	10:10	10:40	Oral
20046	TPI-113	Nuclear Medicine: Simulation and Others	Cherenkov light imaging for lutetium oxodotreotide	502	April 13	10:50	11:50	Oral
20120	TPI-114	Nuclear Medicine: Simulation and Others	Synergistic reconstruction method for PET and Compton imaging of whole gamma imaging	502	April 13	10:50	11:50	Oral
20121	TPI-115	Nuclear Medicine: Simulation and Others	A one-ring prototype of hemispherical brain PET with novel TOF-DOI detectors	502	April 13	10:50	11:50	Oral
20084	TPI-116	Nuclear Medicine: Simulation and Others	Impact of threshold value for maximum standardized uptake value on pretreatment FDG-PET-based prediction models for recurrence in patients with lung cancer prior to SBRT	502	April 13	10:50	11:50	Oral
20042	TPI-117	Nuclear Medicine: Simulation and Others	Considering stable and unstable breathing PET counts during the steady state method	502	April 13	10:50	11:50	Oral
20100	TPI-118	Nuclear Medicine: Simulation and Others	Utility of total-body PET in monitoring carbon ion therapy: demonstration in rat	502	April 13	10:50	11:50	Oral
20039	TPI-119	Photon Therapy: Dose Evaluation	Determination of phantom materials for a CT/MRI-corresponding anthropomorphic multimodal male pelvic phantom for end-to-end test in MR-guided online ART	502	April 13	13:10	13:50	Oral
20107	TPI-120	Photon Therapy: Dose Evaluation	Evaluation of biological equivalent dose-based treatment planning in head and neck region	502	April 13	13:10	13:50	Oral

20057	TPI-121	Photon Therapy: Dose Evaluation	Robustness evaluation of using aperture shape controller in postmastectomy radiotherapy (PMRT) using VMAT	502	April 13	13:10	13:50	Oral
20141	TPI-122	Photon Therapy: Dose Evaluation	Evaluation of the 3D convolutional neural network approach for automated VMAT plan creation in head and neck cancer patients	502	April 13	13:10	13:50	Oral
20037	TPI-123	Proton Therapy	Stopping-power ratio evaluation for proton therapy planning based on dual-energy CT	502	April 13	14:00	15:00	Oral
20038	TPI-124	Proton Therapy	Safety check and dose evaluation of a commercial dual-energy CT stopping-power ratio software for proton planning in the treatment planning system	502	April 13	14:00	15:00	Oral
20071	TPI-125	Proton Therapy	Assessment of point dose and proton range in Monte Carlo vs. pencil beam algorithms for proton therapy treatment planning system	502	April 13	14:00	15:00	Oral
20032	TPI-126	Proton Therapy	The effect of minimum monitor units (MMU) on the quality and delivery efficiency of proton therapy	502	April 13	14:00	15:00	Oral
20112	TPI-127	Proton Therapy	Optimization of light-ion quantum molecular dynamics model for nuclear fragmentation in proton therapy	502	April 13	14:00	15:00	Oral
20127	TPI-128	Proton Therapy	Accuracy of patient-specific deep learning for markerless tumor tracking; some comprehensive tests using lung phantoms and radiochromic films	502	April 13	14:00	15:00	Oral