The 2nd ICRPT
List of accepted abstract

Registration No.	Program No.	Session title	Presentation title	Date	Room	Start	End	Style
20001	TPI-097	CT-1: Analysis	Quantitative measurement of small pulmonary vessel volume to evaluate right ventricular function in patients with acute pulmonary embolism	April 16	502	9:40	10:20	Oral
20002	TPI-006	Radiation Protection	Findings for manufacturing novel X-ray shields having elasticity	April 13	502	14:30	15:20	Oral
20003	TPI-031	Image Informatics: Detection	Improving calcified lesion detection in coronary artery calcium scan by using DenseNet: a phantom study	April 14	502	8:50	9:30	Oral
20004	TPI-067	Detector	A novel function for wearable dosimeters: to determine both incident direction and absolute dose of X-rays during IVR procedure	April 15	502	10:00	10:50	Oral
20005	TPI-089	X-ray-1: Analysis	A correction method for object edge blurring that is effective for quantitative analysis using photon counting imaging	April 16	502	8:00	8:40	Oral
20006	TPI-088	X-ray-2: Technique	Using system simulation software flexsim to improve the workflow line-taking the radiology department of a hospital in Hsinchu, Taiwan as an example	April 15	502	16:40	17:30	Oral
20007	TPI-010	Radiation Protection	Proposal of new effective dose conversion factor using SSDE obtained from dose index resistry	April 13	502	14:30	15:20	Oral
20009	TPI-033	Image Informatics: Detection	A state-of-the-art python model for breast cancer detection	April 14	502	8:50	9:30	Oral
20010	TPI-090	X-ray-1: Analysis	Suitability of high-tube-voltage imaging when using energy resolving photon counting detector (ERPCD): simulation study	April 16	502	8:00	8:40	Oral
20011	TPI-013	Image Informatics: Classifiction	Pilot study for deep learning-based automatic classification of sphenoid sinus among head post-mortem computed tomography images in drowning victims	April 13	502	15:30	16:20	Oral
20012	TPI-005	Radiomics	Multi-institutional radiomics phantom study using on-board volumetric images	April 13	502	13:30	14:20	Oral
20014	TPI-101	CT-2: Dose and Technique	Establishment of national diagnostic reference levels and achievable doses for CT protocols in Korea	April 16	502	10:30	11:10	Oral
20015	TPI-016	Treatment Planning Computed Tomography	Monte carlo simulation for the air-electron stream in MR-IGRT with both PTSIM and planning station	April 13	502	16:30	17:20	Oral
20016	TPI-084	X-ray-2: Technique	Cone-beam CT Hepatic Arteriography image comparative evaluation according to the dilution ratio of contrast agent during Transarterial chemoembolization	April 15	502	16:40	17:30	Oral
20017	TPI-062	Quality Assurance and Quality Control	Using Monte Carlo to simulate radioactive materials, ambient dose equivalent H(10) in Linacs room in FF and FFF mode	April 15	502	9:00	9:50	Oral
20018	TPI-011	Image Informatics: Classification	Production of X-ray image classification software using convolutional neural network and usability assessment	April 13	502	15:30	16:20	Oral
20019	TPI-068	Detector	Performance evaluation standards for medical Compton imaging systems	April 15	502	10:00	10:50	Oral
20020	TPI-001	Radiomics	Topological imaging signatures with tumor volumes for prediction of distant metastasis after stereotactic ablative radiotherapy for patients with stage I non-small cell lung cancer	April 13	502	13:30	14:20	Oral
20022	TPI-111	Image Informatics: Prediction	Prognoses prediction of NSCLC patients with CT image features linked with gene expression	April 16	502	14:00	14:40	Oral
20023	TPI-017	Treatment Planning Computed Tomography	Dosimetric impact of combined 4D-CT ventilation and SPECT perfusion image-guided treatment planning for lung cancer	April 13	502	16:30	17:20	Oral
20024	TPI-091	X-ray-1: Analysis	A study on clinical exposure index using actual clinical data of mobile chest radiography in university hospital of Korea	April 16	502	8:00	8:40	Oral
20025	TPI-034	Nuclear Medicine-1: Performance Evaluation	Evaluation of the partial volume effects using small-sphere phantom in PET/CT system	April 14	502	9:40	10:20	Oral
20026	TPI-021	Photon Dosimetry and Electron Irradiation Technique	Evaluation of beam matching accuracy comparison for same model linear accelerator	April 13	502	17:30	18:20	Oral
20027	TPI-052	Particle: Dosimetry and Monte Carlo Simulation	Investigation of response characteristics of radiophotoluminescence dosimeter in intensity-modulated proton therapy	April 14	502	17:30	18:20	Oral
20028	TPI-092	X-ray-1: Analysis	Detection performance of pulmonary impairments with dynamic chest radiography: a virtual imaging trial	April 16	502	8:00	8:40	Oral
20029	TPI-102	CT-2: Dose and Technique	Thyroid dose reduction related to the overranging effect by using a novel sponge-type shield during high-pitch chest CT examination	April 16	502	10:30	11:10	Oral
20030	TPI-096	Radiation Measurement	Feasibility study of optical observation of the boron dose distribution as a quality assurance tool for boron neutron capture therapy	April 16	502	8:50	9:30	Oral
20031	TPI-093	Radiation Measurement	Evaluation of Backscatter Factor by an Anthropomorphic Phantom for Pediatric in general radiography	April 16	502	8:50	9:30	Oral

20032	TPI-069	Detector	Application of a standard performance evaluation method for a cost-effective Compton camera using high-sensitive inorganic scintillators	April 15	502	10:00	10:50	Oral
20033	TPI-022	Photon Dosimetry and Electron Irradiation Technique	Investigation of properties related to BeO-based OSL dosimeter sensitivity in high-energy photon beam	April 13	502	17:30	18:20	Oral
20034	TPI-027	Image Informatics: Segmentation	Novel segmentation model for well-differentiated hepatocellular carcinoma regions using dense V-net with three phase images of dynamic contrast-enhanced CT	April 14	502	8:00	8:40	Oral
20035	TPI-098	CT-1: Analysis	Verification of CT contrast enhancement effect by a systemic circulating vascular phantom	April 16	502	9:40	10:20	Oral
20036	TPI-015	Image Informatics: Classifiction	Deep learning based nuclear lung test classification model	April 13	502	15:30	16:20	Oral
20037	TPI-113	Ultrasound	Application of YOLO-based deep learning to thyroid ultrasound imaging	April 16	502	14:50	15:20	Oral
20038	TPI-028	Image Informatics: Segmentation	Development of an accurate and rapid auto-segmentation method for alveolar bone and teeth using virtual cone-beam computed tomography and artificial intelligence technology	April 14	502	8:00	8:40	Oral
20039	TPI-053	Particle: Dosimetry and Monte Carlo Simulation	Simulation evaluation of range-estimation uncertainty for therapeutic carbon-ion beams by measuring secondary electron bremsstrahlung with a large-pinhole X-ray camera	April 14	502	17:30	18:20	Oral
20040	TPI-008	Radiation Protection	Scattered dose rate distribution and eye lens doses of physicians in over-couch X-ray tube geometry: Effect of radioprotective curtain length	April 13	502	14:30	15:20	Oral
20041	TPI-002	Radiomics	Development of radiomics-based deformable image registration algorithm	April 13	502	13:30	14:20	Oral
20042	TPI-057	Irradiation and Treatment Planning Technique	Robust beam delivery with jaw margin expansion in small field linac-based stereotactic radiosurgery	April 15	502	8:00	8:50	Oral
20043	TPI-063	Quality Assurance and Quality Control	A study on lifetime prediction using linear regression analysis of diode electron gun for a linear accelerator	April 15	502	9:00	9:50	Oral
20044	TPI-054	Particle: Dosimetry and Monte Carlo Simulation	Monte Carlo calculation of perturbation correction factor for stem in micro ionization chamber in proton beam	April 14	502	17:30	18:20	Oral
20045	TPI-023	Photon Dosimetry and Electron Irradiation Technique	Investigation of high precision of electron beam convergence under low vacuum and practicality of decompression chamber for electron beam scanning irradiation	April 13	502	17:30	18:20	Oral
20046	TPI-018	Treatment Planning Computed Tomography	Characterization of a new X-ray computed tomography polymer gel dosimeter	April 13	502	16:30	17:20	Oral
20047	TPI-072	Particle: Treatment Planning Technique	Robustness evaluation of mean liver dose in proton therapy under various fractionation scheme and fraction-specific random setup error	April 15	502	14:10	14:50	Oral
20048	TPI-073	Particle: Treatment Planning Technique	Evaluation of the proton transport algorithm in Monte Carlo code PHITS by Fano test	April 15	502	14:10	14:50	Oral
20049	TPI-080	Dosimetric Evaluation and Biophysics	Investigation of longitudinal magnetic field effects on OH radical	April 15	502	15:50	16:30	Oral
20050	TPI-081	Dosimetric Evaluation and Biophysics	Impact of Cherenkov light correction methods and small-field effects on the plastic scintillation detector	April 15	502	15:50	16:30	Oral
20051	TPI-003	Radiomics	Computed tomography-based radiomics for classifying neurological prognosis of cardiac arrest patients	April 13	502	13:30	14:20	Oral
20052	TPI-019	Treatment Planning Computed Tomography	Comparison between planning CT image and dose distribution signatures for prediction of radiation-induced pneumonitis in patients with non-small cell lung cancer before stereotactic ablative radiotherapy	April 13	502	16:30	17:20	Oral
20053	TPI-109	Image Informatics: Prediction	A study on a predictive model for renal stone diagnosis based on artificial neural network	April 16	502	14:00	14:40	Oral
20054	TPI-055	Particle: Dosimetry and Monte Carlo Simulation	Measurement of the nuclear reaction cross sections of positron-emitting nuclides using the annihilation gamma-ray detection system nBOLPs	April 14	502	17:30	18:20	Oral
20055	TPI-047	MR: Analysis and Technique	Quantifying regional cerebral blood flow using motion-compensated diffusion imaging with phase-contrast (mDIP)	April 14	502	16:30	17:20	Oral
20056	TPI-044	Image Informatics: Image Processing	Development of super-resolution for brain MRI images	April 14	502	15:30	16:20	Oral
20057	TPI-014	Image Informatics: Classification	Preliminary study on the classification if atrial fibrillation types using deep learning models with attention mechanism -comparion of vision transformer and CNN model-	April 13	502	15:30	16:20	Oral
20058	TPI-030	Image Informatics: Detection	Ensemble detection scheme of pneumonia from chest X-ray images using multiple convolution neural networks	April 14	502	8:50	9:30	Oral
20059	TPI-110	Image Informatics: Prediction	Automated response prediction of the extracorporeal shock wave lithotripsy using abdominal CT images	April 16	502	14:00	14:40	Oral
20060	TPI-094	Radiation Measurement	Effect of patient position on radiation dose in chest lateral radiography with AEC mode	April 16	502	8:50	9:30	Oral
20061	TPI-024	Photon Dosimetry and Electron Irradiation Technique	Design fabrication and validation of 3D printed specific end term applicator for electron radiation therapy	April 13	502	17:30	18:20	Oral
20062	TPI-007	Radiation Protection	A study on changes in exposure dose through development of bismuth shielding during pediatric general radiography examination	April 13	502	14:30	15:20	Oral
20063	TPI-076	Particle: Evaluation of Implanted Electronic Device	Evaluation of air quality in the radiation therapy room	April 15	502	15:00	15:40	Oral

20064	TPI-082	Dosimetric Evaluation and Biophysics	Evaluation of the dosimetric effect of interfractional motion associated with a high-fluence beam in a low-density area of the planning target volume using intensity-modulated radiation therapy	April 15	502	15:50	16:30	Oral
20065	TPI-085	X-ray-2: Technique	A study on image quality and dose evolution according to exposure conditions in ribs X-ray imaging of pediatric patients	April 15	502	16:40	17:30	Oral
20066	TPI-058	Irradiation and Treatment Planning Technique	Optimal setting of virtual bolus method for breast cancer treated with volumetric modulated arc therapy	April 15	502	8:00	8:50	Oral
20068	TPI-064	Quality Assurance and Quality Control	Prediction of vertebral compression fracture after stereotactic body radiation therapy for spinal metastases using radiomic and dosiomic features	April 15	502	9:00	9:50	Oral
20070	TPI-032	Image Informatics: Detection	The implementation of automated intracerebral hemorrhage detection and radiology report using deep learning	April 14	502	8:50	9:30	Oral
20072	TPI-074	Particle: Treatment Planning Technique	Development of a DNA damages repair model considered alternative non-homologous end joining.	April 15	502	14:10	14:50	Oral
20073	TPI-065	Quality Assurance and Quality Control	Generating fully random prediction results of patient-specific quality assurance	April 15	502	9:00	9:50	Oral
20074	TPI-042	Image Informatics: Image Processing	Development of a deep learning-based bone suppression technique for pediatric dynamic chest radiography using virtual patients	April 14	502	15:30	16:20	Oral
20075	TPI-043	Image Informatics: Image Processing	Tube deletion in chest radiograph using cycle generative adversarial networks	April 14	502	15:30	16:20	Oral
20076	TPI-105	Image Informatics: Reconstruction	Iterative CT reconstruction with deep neural networks	April 16	502	11:20	12:00	Oral
20077	TPI-059	Irradiation and Treatment Planning Technique	Evaluation of dose dividing ratio in a hybrid volumetric modulated arc therapy plan for non-small cell lung cancer	April 15	502	8:00	8:50	Oral
20078	TPI-075	Particle: Treatment Planning Technique	Spatial resolution of Compton camera in BNC reaction imaging	April 15	502	14:10	14:50	Oral
20079	TPI-077	Particle: Evaluation of Implanted Electronic Device	Tolerable doses of electronic devices in radiation therapy	April 15	502	15:00	15:40	Oral
20080	TPI-078	Particle: Evaluation of Implanted Electronic Device	Evaluation of electronic device soft errors in heavy ion therapy using a human phantom	April 15	502	15:00	15:40	Oral
20081	TPI-079	Particle: Evaluation of Implanted Electronic Device	Contribution evaluation of secondary particles to soft errors in carbon ion radiotherapy	April 15	502	15:00	15:40	Oral
20082	TPI-045	Image Informatics: Image Processing	Deep learning technology for age estimation based on selected tooth condition using dental radiography	April 14	502	15:30	16:20	Oral
20083	TPI-038	Nuclear Medicine-2: Simulation and Others	A Monte Carlo simulation study of performance evaluation for sensitivity and scatter fraction in gamma camera scintigraphy with TlBr pixelated semiconductor detector using various parallel-hole collimator designs	April 14	502	10:30	11:10	Oral
20084	TPI-107	Image Informatics: Reconstruction	Development of a method for improvement of SPECT images reconstructed from sparse projection data by deep learning technique	April 16	502	11:20	12:00	Oral
20085	TPI-060	Irradiation and Treatment Planning Technique	Fundamental evaluation of brass mesh bolus in photon beam therapy	April 15	502	8:00	8:50	Oral
20086	TPI-048	MR: Analysis and Technique	Evaluation of submillimeter non-rigid registration for diffusion tensor imaging distortion using CT images	April 14	502	16:30	17:20	Oral
20087	TPI-112	Image Informatics: Prediction	Artificial neural network for prediction model of histological subtypes for breast cancer using 18F-FDG PET/CT	April 16	502	14:00	14:40	Oral
20088	TPI-056	Particle: Dosimetry and Monte Carlo Simulation	Monte Carlo calculations of chamber-specific perturbation correction factors for several ionization chamber types in carbon-ion beams	April 14	502	17:30	18:20	Oral
20089	TPI-099	CT-1: Analysis	Study of noise reduction effect on temperature resolution in CT-based thermometry	April 16	502	9:40	10:20	Oral
20090	TPI-009	Radiation Protection	A study on the calculation of entrance surface dose from exposure index as per IEC in mobile chest radiography	April 13	502	14:30	15:20	Oral
20091	TPI-004	Radiomics	Investigation of repeatability of persistent homology features for patients with lung cancer based on computed tomography images	April 13	502	13:30	14:20	Oral
20092	TPI-046	Image Informatics: Image Processing	Dental estimation age using darknet-19 based on dental X-ray panoramic images	April 14	502	15:30	16:20	Oral
20093	TPI-012	Image Informatics: Classification	Deep learning based gender classification of panoramic dental X-ray	April 13	502	15:30	16:20	Oral
20094	TPI-061	Irradiation and Treatment Planning Technique	What is the optimal isodose line for stereotactic radiotherapy for brain metastases using HyperArc?	April 15	502	8:00	8:50	Oral
20095	TPI-066	Quality Assurance and Quality Control	Prediction of tumor growth trajectories in patients with stage I non-small cell lung cancer receiving stereotactic body radiotherapy	April 15	502	9:00	9:50	Oral
20096	TPI-100	CT-1: Analysis	Spectral imaging performance evaluation for a prototype full-size photon counting CT system at clinical dose levels	April 16	502	9:40	10:20	Oral
20097	TPI-049	MR: Analysis and Technique	Altered functional connectivity and structural connectivity in patients with focal epilepsy using resting-state functional MRI and diffusion MRI	April 14	502	16:30	17:20	Oral
20098	TPI-103	CT-2: Dose and Technique	Quantitative image quality comparison between normal resolution and super high resolution modes of a clinical prototype photon counting CT system	April 16	502	10:30	11:10	Oral

20099	TPI-035	Nuclear Medicine-1: Performance Evaluation	Performance evaluation of body-contouring scan in Lu-177 SPECT/CT with ring-shaped whole-body CZT-camera	April 14	502	9:40	10:20	Oral
20100	TPI-104	CT-2: Dose and Technique	Estimating the artifact correction integrity of MAR in different density of metal tooth prosthesis	April 16	502	10:30	11:10	Oral
20101	TPI-051	MR: Analysis and Technique	MR spectroscopy-based metabolite ratio analysis of MRI images for metastatic lesion	April 14	502	16:30	17:20	Oral
20102	TPI-083	Dosimetric Evaluation and Biophysics	High-dose-rate brachytherapy for cervical cancer: The effect of total reference air kerma on the results of single-channel and tri-channel applicators	April 15	502	15:50	16:30	Oral
20103	TPI-020	Treatment Planning Computed Tomography	Determination of initial parameters of stoichiometric CT calibration MVCT model	April 13	502	16:30	17:20	Oral
20104	TPI-106	Image Informatics: Reconstruction	Subject-specific deep learning reconstruction for fast free-breathing cardiac perfusion MRI	April 16	502	11:20	12:00	Oral
20105	TPI-108	Image Informatics: Reconstruction	End-to-end unsupervised CNN-based PET image reconstruction with relative difference penalty	April 16	502	11:20	12:00	Oral
20106	TPI-070	Detector	Practical application of scintillator-type QA imaging detector	April 15	502	10:00	10:50	Oral
20107	TPI-095	Radiation Measurement	Analysis of adjacent organs exposure doses in X-ray guided stereostatic breast biopsy 2D procedure and 3D procedure	April 16	502	8:50	9:30	Oral
20108	TPI-036	Nuclear Medicine-1: Performance Evaluation	Imaging performance of a brain-dedicated hemispherical PET over whole-body cylindrical scanners	April 14	502	9:40	10:20	Oral
20109	TPI-086	X-ray-2: Technique	Development and performance evaluation of improved X-ray detector system for whole body scanography based on CsI material	April 15	502	16:40	17:30	Oral
20110	TPI-050	MR: Analysis and Technique	Optimization of median modified Wiener filter for improving cerebrospinal fluid segmentation performance in brain MR image: A simulation study	April 14	502	16:30	17:20	Oral
20111	TPI-087	X-ray-2: Technique	Development and usefulness evaluation of auxiliary device for weight bearing radiography	April 15	502	16:40	17:30	Oral
20112	TPI-114	Ultrasound	An end to end based computer-aided diagnosis system for automatically quantify the activity of rheumatoid arthritis	April 16	502	14:50	15:20	Oral
20113	TPI-115	Ultrasound	Optimization of window size for noise reduction filter in simulated ultrasound image	April 16	502	14:50	15:20	Oral
20114	TPI-025	Photon Dosimetry and Electron Irradiation Technique	Study on convergence control and convergence distance of electron beam using multiple solenoids	April 13	502	17:30	18:20	Oral
20115	TPI-026	Image Informatics: Segmentation	Two-stage X-ray-based segmentation of hip joint space using deep learning	April 14	502	8:00	8:40	Oral
20116	TPI-039	Nuclear Medicine-2: Simulation and Others	Potential of 909 keV Compton imaging outperforming PET in ^{89}Zr measurement with Si/LGSO whole gamma imaging: a simulation study	April 14	502	10:30	11:10	Oral
20117	TPI-037	Nuclear Medicine-1: Performance Evaluation	Tracking the same fast-LGSO crystals by changing surface treatments for faster timing resolution in PET	April 14	502	9:40	10:20	Oral
20118	TPI-029	Image Informatics: Segmentation	Rheumatoid arthritis synovitis segmentation based on unsupervised learning and time-intensity curve signal data on dynamic contrast enhaced MRI	April 14	502	8:00	8:40	Oral
20119	TPI-040	Nuclear Medicine-2: Simulation and Others	Comparison of kinetics of the produced positoron emitters after carbon beam irradiation and that of the MRI constrast agents in rat tumor	April 14	502	10:30	11:10	Oral
20120	TPI-041	Nuclear Medicine-2: Simulation and Others	Positronium lifetime measurement in stable radical aqueous solutions for dose estimation in radiotherapy	April 14	502	10:30	11:10	Oral
20121	TPI-071	Detector	Simulation study of a deep-learning based position-sensitive forceps-type coincidence detector	April 15	502	10:00	10:50	Oral