

**The 3rd ICRPT**  
**List of accepted abstract**

Reg. No.	Program No.	Session title	Presentation title	Room	Date	Start	End	Style
20001	TPI-053	X-ray: Technique & Analysis	Suitability of High Tube Voltage Imaging for General Radiography When Using Energy Resolving Photon Counting Detectors	502	April 13	8:00	8:50	Oral
20002	TPI-087	CT: Dose & Analysis	Convenient procedure to determine a dose reduction factor of the collar-type thyroid shield used for the chest CT examination	502	April 14	8:00	8:50	Oral
20005	TPI-045	Radiation measurement	Estimation of absorbed dose to testis during CT examination	502	April 12	17:00	17:40	Oral
20006	TPI-046	Radiation measurement	A novel analysis method of surface dose taking into account the incident angle of X-rays during a helical scanning CT examination	502	April 12	17:00	17:40	Oral
20007	TPI-054	X-ray: Technique & Analysis	A correction method for image blurring to derive accurate quantitative material information using an energy resolving photon counting detector.	502	April 13	8:00	8:50	Oral
20008	TPI-088	CT: Dose & Analysis	Discrimination of non-metal dental material using photon counting CT toward identifying human remains	502	April 14	8:00	8:50	Oral
20009	TPI-081	Image informatics: Processing	Performance evaluation of ResNet model for noise reduction according to Gaussian noise level in nuclear medicine images	502	April 13	16:10	17:10	Oral
20010	TPI-049	Radiation protection	Optimization of male gonad dose in abdominal X-ray imaging: A phantom study	502	April 12	17:50	18:30	Oral
20011	TPI-061	Proton therapy	Perturbation correction factors for semiflex-type ionization chambers in proton beams using Monte Carlo simulation PHITS	502	April 13	9:00	9:50	Oral
20012	TPI-064	Biophysics	The unique expression of non-coding microRNAs in radioresistant fraction of acute promyelocytic leukemia HL60 cell	502	April 13	10:00	10:30	Oral
20013	TPI-039	Particle therapy: Imaging & Dosimetric evaluation	Development of multilayer liquid neutron spectrometer for neutron spectrum measurement in BNCT irradiation field	502	April 12	10:20	11:10	Oral
20014	TPI-040	MR: Technique & Analysis	Perfusion and diffusion after preoperative endovascular embolization in meningioma using IVIM analysis	502	April 12	16:00	16:50	Oral
20015	TPI-001	Image informatics: Classification & Detection	Subtype prediction in breast MR images using 3DCNN and ensemble learning	502	April 11	13:30	14:30	Oral
20016	TPI-069	Photon therapy: Dose calculation & Evaluation	Physical and biological treatment plan evaluation of IMRT in the treatment of brain cancer	502	April 13	10:40	11:30	Oral
20017	TPI-073	Photon therapy: IGRT & Dynamic tumor tracking	Optimizing patient and target position setup depending on respiration using MVCT	502	April 13	14:10	15:00	Oral
20018	TPI-028	Nuclear medicine: Simulation & Others	Feasibility of Iodine-124 for positronium lifetime measurement with TOF-PET detectors	502	April 12	8:50	9:30	Oral

20019	TPI-089	CT: Dose & Analysis	A novel evaluation procedure of X-ray shielding ability by estimating X-ray incident direction during helical CT examination	502	April 14	8:00	8:50	Oral
20020	TPI-082	Image informatics: Processing	A workflow for training DenseNet to reduce image noise in thin-sliced coronary artery calcium scans	502	April 13	16:10	17:10	Oral
20021	TPI-071	Photon therapy: IGRT & Dynamic tumor tracking	Optimizing kV CBCT protocol for the abdomen on Varian Halcyon linear accelerator	502	April 13	14:10	15:00	Oral
20022	TPI-007	Image informatics: Segmentation	3D body composition analysis via body cavity recognition in body CT images	502	April 11	14:40	15:30	Oral
20023	TPI-070	Photon therapy: Dose calculation & Evaluation	Tips for effective use in gEUD optimization objective while avoiding dose leverage effect: A case study for brain metastasis stereotactic radiotherapy	502	April 13	10:40	11:30	Oral
20024	TPI-060	Proton therapy	Dose perturbations from gold marker in scanning proton therapy	502	April 13	9:00	9:50	Oral
20025	TPI-062	Proton therapy	3D prompt gamma imaging in a dual-head multi-slit system for proton beam range monitoring	502	April 13	9:00	9:50	Oral
20026	TPI-050	Radiation protection	The study on shielding methods to reduce dose to the breast, thyroid, and lungs during chest lateral radiography	502	April 12	17:50	18:30	Oral
20027	TPI-017	Radiomics	Proposal of a differential diagnostic Index for of recurrent brain metastasis or radiation-induced brain necrosis by radiomics analysis using C-11 methionine PET	502	April 11	16:40	17:50	Oral
20028	TPI-051	Radiation protection	Korean national CT diagnostic reference levels update using national dose index registry system	502	April 12	17:50	18:30	Oral
20029	TPI-012	Education	Assessing the viability of integrating virtual reality programs in national examination practical tests for radiologic technologists: A nationwide survey of radiology department students	502	April 11	15:40	16:30	Oral
20030	TPI-029	Nuclear medicine: Simulation & Others	A Study on the Use of Assist Device for Convenience of Upper Extremity Imaging during Bone Scan in Bed-Ridden Patients	502	April 12	8:50	9:30	Oral
20031	TPI-015	Education	Analysis of the reliability of conversational artificial intelligence in the field of nuclear medicine using AI chatbots	502	April 11	15:40	16:30	Oral
20034	TPI-013	Education	Evaluation of the usefulness of nuclear medicine practice programs	502	April 11	15:40	16:30	Oral
20035	TPI-055	X-ray: Technique & Analysis	Image quality and dose criterion conformity analysis for evaluating utility of Scattered radiation removal processing on mobile x-ray machine	502	April 13	8:00	8:50	Oral
20036	TPI-014	Education	The application value of Mini-CEX in the transfer training of imaging technicians	502	April 11	15:40	16:30	Oral
20037	TPI-063	Biophysics	Assessing tumor volume changes varying the dose delivery time using a novel mathematical model in stereotactic body radiation therapy for non-small cell lung cancer	502	April 13	10:00	10:30	Oral
20038	TPI-024	Nuclear medicine: Performance evaluation	Feasibility of Dual-Time-Point Parametric Imaging using Dynamic 68Gallium-Prostate Specific Membrane Antigen-11 (68Ga-PSMA-11) PET/CT in Prostate Cancer Patients	502	April 12	8:00	8:40	Oral
20039	TPI-018	Radiomics	Mammography-based radiomics for prediction of axillary lymph node metastasis in invasive breast cancer	502	April 11	16:40	17:50	Oral

20040	TPI-019	Radiomics	Recurrence prediction after radiation treatment in patients with esophageal squamous cell carcinoma using CT-based radiomics	502	April 11	16:40	17:50	Oral
20041	TPI-020	Radiomics	Novel radiomics/dosimetrics-based treatment failure prediction for pharyngeal cancer patients	502	April 11	16:40	17:50	Oral
20042	TPI-047	Radiation measurement	Improvement of crystal identification accuracy for depth-of-interaction detector system with peak-to-charge discrimination method	502	April 12	17:00	17:40	Oral
20043	TPI-075	Photon therapy: IGRT & Dynamic tumor tracking	Estimation of three-dimensional target positions from a single direction using orthogonal kV x-ray imaging subsystems for markerless tumor tracking	502	April 13	14:10	15:00	Oral
20044	TPI-066	Photon therapy: Dose calculation & Evaluation	Evaluation of the utility of CT image reconstruction using deep learning for treatment planning	502	April 13	10:40	11:30	Oral
20045	TPI-037	Particle therapy: Imaging & Dosimetric evaluation	Evaluation of dose calculation algorithm with a combination of Monte Carlo method and removal-diffusion equation for BNCT	502	April 12	10:20	11:10	Oral
20046	TPI-032	Particle therapy: Cardiac implantable electronic device	Energy dependency on soft errors occurrence in carbon ion radiotherapy	502	April 12	9:40	10:10	Oral
20047	TPI-021	Radiomics	Prognostic models for distant metastasis based on delta-radiomics features in patients with pancreatic carcinoma	502	April 11	16:40	17:50	Oral
20048	TPI-058	Proton therapy	Dosimetric comparison of planning methods in robustly optimized stereotactic body proton therapy for lung cancer considering interplay effects and setup uncertainty	502	April 13	9:00	9:50	Oral
20049	TPI-002	Image informatics: Classification & Detection	Imaging biopsy models for identification of triple-negative breast cancer at preoperative dynamic contrast-enhanced magnetic resonance images	502	April 11	13:30	14:30	Oral
20050	TPI-072	Photon therapy: IGRT & Dynamic tumor tracking	Inter-facility comparison of CT number-density conversion tables for Radixact	502	April 13	14:10	15:00	Oral
20051	TPI-067	Photon therapy: Dose calculation & Evaluation	Pioneering change in radiotherapy: The transition to biological adaptive radiotherapy (BART)	502	April 13	10:40	11:30	Oral
20052	TPI-041	MR: Technique & Analysis	Analysis of cardiac function in standing and supine postures using Gravity MRI	502	April 12	16:00	16:50	Oral
20053	TPI-084	Image informatics: Processing	Iterative CT reconstruction with diffusion model	502	April 13	16:10	17:10	Oral
20054	TPI-056	X-ray: Technique & Analysis	Evaluation of Usefulness of Customized Shielding Plate in Posteroanterior Chest Radiography for Pregnant Women	502	April 13	8:00	8:50	Oral
20055	TPI-008	Image informatics: Segmentation	Automated segmentation scheme of highly update regions in dedicated breast PET images without manual annotation using Cycle GAN	502	April 11	14:40	15:30	Oral
20056	TPI-033	Particle therapy: Cardiac implantable electronic device	Impact of treatment planning on soft error risk in carbon ion radiotherapy	502	April 12	9:40	10:10	Oral
20057	TPI-034	Particle therapy: Cardiac implantable electronic device	Measuring the number of soft errors during proton and carbon ion radiotherapy	502	April 12	9:40	10:10	Oral
20058	TPI-003	Image informatics: Classification & Detection	Visualization of discriminative features in MRI motion artifact classification using gradient-weighted class activation mapping	502	April 11	13:30	14:30	Oral

20059	TPI-059	Proton therapy	Dosimetric effect of uterine and ovarian doses in craniospinal irradiation using VMAT and SFUD depending on the bowel and bladder volumes	502	April 13	9:00	9:50	Oral
20060	TPI-022	Radiomics	Homology-based -omics model for radiation pneumonitis in NSCLC stage III patients using whole-lung CT: A more comprehensive way in disease prognosis	502	April 11	16:40	17:50	Oral
20061	TPI-030	Nuclear medicine: Simulation & Others	Dual-panel PET system to be enabled by 30-ps super-fast detector: a preliminary simulation study	502	April 12	8:50	9:30	Oral
20062	TPI-009	Image informatics: Segmentation	Automatic segmentation and volume measurement of sphenoid sinus fluid in post-mortem CT images of drowning cases based on Deep learning	502	April 11	14:40	15:30	Oral
20063	TPI-079	Brachytherapy & Others	Improvement of body surface monitoring accuracy by installing multiple infrared depth cameras	502	April 13	15:10	16:00	Oral
20064	TPI-077	Brachytherapy & Others	Gamma photon imaging in water for the quality assurance of high-dose-rate brachytherapy	502	April 13	15:10	16:00	Oral
20065	TPI-052	Radiation protection	A study on methods for reducing radiation dose to the breast, thyroid, and lungs during lateral chest radiography	502	April 12	17:50	18:30	Oral
20066	TPI-090	CT: Dose & Analysis	Study of various image reconstruction method on temperature resolution in CT-based thermometry	502	April 14	8:00	8:50	Oral
20067	TPI-074	Photon therapy: IGRT & Dynamic tumor tracking	Can synchrony eliminate the effects of setup errors?	502	April 13	14:10	15:00	Oral
20068	TPI-005	Image informatics: Classification & Detection	Automated detection of lung lesions in low dose CT images for attenuation correction using variational autoencoder	502	April 11	13:30	14:30	Oral
20070	TPI-068	Photon therapy: Dose calculation & Evaluation	Comparison of physical and biological dose optimization in dose accumulation with deformable image registration	502	April 13	10:40	11:30	Oral
20072	TPI-076	Brachytherapy & Others	High dose rate brachytherapy for cervical cancer using an artificial neural network	502	April 13	15:10	16:00	Oral
20073	TPI-057	X-ray: Technique & Analysis	Investigation of optimal irradiation time in chest digital radiography: A virtual imaging trial	502	April 13	8:00	8:50	Oral
20074	TPI-004	Image informatics: Classification & Detection	Deep learning for high risk and low risk ischemic strokes based on MRI images	502	April 11	13:30	14:30	Oral
20075	TPI-080	Brachytherapy & Others	Development of the End-to-End phantom for comprehensive coordinate coincidence in multiple image guidance including infrared depth camera	502	April 13	15:10	16:00	Oral
20076	TPI-083	Image informatics: Processing	Uncertainty-based mixture of a deep image prior and an original reconstructed images in PET	502	April 13	16:10	17:10	Oral
20077	TPI-025	Nuclear medicine: Performance evaluation	Development of the next-generation WGI prototype with modified GAGG-CLS scatterer and fast-LGSO TOF absorber detectors	502	April 12	8:00	8:40	Oral
20078	TPI-085	Image informatics: Processing	A generative adversarial network based on Swin Transformer for reducing streak artifacts in sparse-view micro-computed tomography	502	April 13	16:10	17:10	Oral
20079	TPI-048	Radiation measurement	Verification of basic characteristics to fabricate flexible detectors using a 3D printer	502	April 12	17:00	17:40	Oral
20080	TPI-065	Biophysics	Development of a robust predictive model for time variant trajectories of tumor growth in lung cancer patients treated with TKI	502	April 13	10:00	10:30	Oral

20081	TPI-031	Nuclear medicine: Simulation & Others	Intra-tumoral biological washout-rate distribution in range-verification PET: a preliminary rat study with a 12C-beam	502	April 12	8:50	9:30	Oral
20082	TPI-042	MR: Technique & Analysis	Assessing portal vein spongy alteration: a comparative study of non-enhanced MR venography with CT venography	502	April 12	16:00	16:50	Oral
20083	TPI-078	Brachytherapy & Others	Characteristic evaluation of next generation scintillator dose distribution detector for patient QA and machine QA	502	April 13	15:10	16:00	Oral
20084	TPI-035	Particle therapy: Imaging & Dosimetric evaluation	A preliminary report of the first clinical study of OpenPET: in-beam range verification for carbon ion therapy	502	April 12	10:20	11:10	Oral
20085	TPI-026	Nuclear medicine: Performance evaluation	First demonstration of "Scratch-PET" for intraoperative PET with a hand-held probe-type detector	502	April 12	8:00	8:40	Oral
20086	TPI-027	Nuclear medicine: Performance evaluation	Imaging simulation of a next-version hemispherical brain PET powered by a novel DOI/TOF detector	502	April 12	8:00	8:40	Oral
20087	TPI-086	Image informatics: Processing	Multi-modal learning from paired images: Feasibility study for super high-resolution model using DEXA and general radiographic images	502	April 13	16:10	17:10	Oral
20088	TPI-036	Particle therapy: Imaging & Dosimetric evaluation	Additive manufacturing technology in fabricating dosimetry phantoms for synchrotron radiation therapy	502	April 12	10:20	11:10	Oral
20089	TPI-006	Image informatics: Classification & Detection	Slab-digitally-reconstructed radiographs inferred from X-ray fluoroscopic images	502	April 11	13:30	14:30	Oral
20090	TPI-010	Image informatics: Segmentation	Individual Tooth Segmentation using U-Net Based on Dental X-ray Panoramic Images	502	April 11	14:40	15:30	Oral
20091	TPI-016	Education	Review of artificial intelligence methods in dental age estimation using panoramic radiograph image	502	April 11	15:40	16:30	Oral
20092	TPI-011	Image informatics: Segmentation	Utilizing errors for data augmentation techniques to improve accuracy in segmentation of dental radiographic images	502	April 11	14:40	15:30	Oral
20093	TPI-091	CT: Dose & Analysis	Assessing superior vena caval obstruction syndrome: a comparative study of variable speed injection contrast enhanced CT-venography with DSA	502	April 14	8:00	8:50	Oral
20094	TPI-038	Particle therapy: Imaging & Dosimetric evaluation	Structure optimization of a neutron dosimeter for BNCT irradiation field	502	April 12	10:20	11:10	Oral
20095	TPI-023	Radiomics	Prediction of progression in patients with early-stage non- small cell lung cancer treated with surgery and stereotactic body radiotherapy	502	April 11	16:40	17:50	Oral
20096	TPI-043	MR: Technique & Analysis	Prototype positron emission tomography (PET) insert combining proton (1H) and sodium (23Na) magnetic resonance imaging (MRI) radiofrequency coils for a 3 Tesla clinical MRI	Withdrawn				
20097	TPI-044	MR: Technique & Analysis	Microstrip transmission line radiofrequency coil combining positron emission tomography (PET) detector for a 7 Tesla magnetic resonance imaging (MRI) system	Withdrawn				