

March 26, 2026

The 9th International Conference on Image Formation in X-ray Computed Tomography

The table below is the official list of accepted submissions, based on a second round of evaluation carried out by the scientific committee and the conference chair. Each of the submissions has been assigned to one of nine topic categories. Within each category, the submissions are listed in decreasing order of average score over 3 reviewers and 3 criteria (rigor, impact, novelty).



Frédéric Noo
 Professor, Radiology and Imaging Sciences (with tenure)
 University of Utah
 Conference Chair

	Novel CT imaging concepts	Session chairs: M. Kachelriess, H. Zhang
ID	Oral Presentations (M1)	Authors
28	Multisource C-arm CT : Initial Results with a 2 x 2 Carbon Nanotube Source Array	Hojin Jung (Yonsei University); Jongduk Baek (Yonsei University)*
79	One-Dimensional Anti-Scatter Grids for Static CT	Andreas Heinkle (German Cancer Research Center)*; Julien Erath (Siemens Healthineers AG); Lukas Hennemann (German Cancer Research Center); Johan Sunnegaardh (Siemens Healthineers AG); Christian Hofmann (Siemens Healthineers AG); Martin Petersilka (Siemens Healthineers AG); Karl Stierstorfer (Siemens Healthineers AG); Marc Kachelrieß (German Cancer Research Center)
30	Foveated-imaging geometry CT architecture and prior-guided diffusion model enabling global super-resolution image reconstruction	Wenxin Mo (Tsinghua University)*, Yinxian Xia (Tsinghua University), Hao Zhou (Tsinghua University), Hwei Gao (Tsinghua University)
78	PINN-Driven Scatter Correction for Multi-source Linear-array CT	Yankun Wang (Southern Medical University)*; Yule Li (Southern Medical University); Junhao Wu (Southern Medical University); Yuanxiang Gao (Southern Medical University); Haomin Hou (Southern Medical University); Deyang Kong (Southern Medical University); Limin Li (Xi'an Jiaotong University); Jingyi Liao (Southern Medical University); Hao Wang (Southern Medical University); Jianhua Ma (Xi'an Jiaotong University); Dong Zeng (Southern Medical University)
31	Upright Cone-Beam Breast CT: Towards Breast Cancer Screening using Short-Scan and Sparse-View Acquisitions	Hsin Wu Tseng (University of Arizona)*; Jing-Tzyh Chiang (University of Arizona); Srinivasan Vedantham (University of Arizona)
	Poster Presentations (Monday)	
120	Analytical Weighted Reconstruction for Longitudinal Multiple X-ray Source Array CT (MXA-CT)	Jiaming Liu (Johns Hopkins University)*; Gengxin Shi (Johns Hopkins University); Andrew M. Hernandez (University of California Davis); Alejandro Sisniega (Sedecal Corporation, Madrid); Richard E. Colbeth (Varex Imaging Corp.); Vance Robinson (Varex Imaging Corp.); Jeffrey H. Siewerdsen (The University of Texas MD Anderson Cancer Cancer); Craig K. Abbey (University of California, Santa Barbara); Paul Schwoebel (University of New Mexico); John M.

		Boone (University of California Davis); Wojciech Zbijewski (Johns Hopkins University)
128	A Quantum Approach to Statistical Reconstruction Methods in Computed Tomography	Robert Cierniak (Czestochowa University of Technology)*
109	Breaking the G-Force Barrier in CT: A Sixth-Generation Architecture Using a Stationary Magnetically Steered X-ray Source	Hui Hu (Nautilus Xray, Inc.)*, Vitaliy Ziskin (Nautilus Xray, Inc.), Andrew Cross (Nautilus Xray, Inc.), Hong Chen (Nautilus Xray, Inc.)
88	A Static Dual-Ring CT System with Integrated Cold-Cathode X-Ray Source and Detector Arrays: A Simulation Study	Bonghong Ye (Southern Medical University)*; Yule Li (Southern Medical University); Yankun Wang (Southern Medical University); Hao Wang (Southern Medical University); Jingyi Liao (Southern Medical University); Limin Li (Xi'an Jiaotong University); Zhaoying Bian (Southern Medical University); Zhipeng Zhang (Sun Yat-sen University); Jiahua Ma (Xi'an Jiaotong University); Dong Zeng (Southern Medical University)
16	New directions for old detectors	Scott Hsieh (Mayo Clinic)*
90	Practical Geometric Decoupling for Projection Unmixing in Multi-Source Linear-Array CT	Qiule Chen (Southern Medical University)*; Yule Li (Southern Medical University); Junhao Wu (Southern Medical University); Yankun Wang (Southern Medical University); Jingyi Liao (Southern Medical University); Yuanxiang Gao (Southern Medical University); Jianhua Ma (Xi'an Jiaotong University); Hao Wang (Southern Medical University); Dong Zeng (Southern Medical University)

M2	The 4 best scored abstracts	Session chairs: E. Sidky, A. Wang
14	Understanding Radiologist Performance and Missed Lesion Detection	Parmita Mondal (Mayo Clinic)*; Akitoshi Inoue (Mayo Clinic); Rickey Carter (Mayo Clinic); Andrew D Missert (Mayo Clinic); Joel G. Fletcher (Mayo Clinic); Hao Gong (Mayo Clinic); Shuai Leng (Mayo Clinic); Lifeng Yu (Mayo Clinic); Cynthia H. McCollough (Mayo Clinic); Scott S. Hsieh (Mayo Clinic)
126	A Theoretical Prediction of CT-based Radiomics Feature Variance to Improve the Performance Classification Models	Huay Din (University of Pennsylvania)*; Yijie Yuan (Johns Hopkins University); Grace Hyun Kim (UCLA); Michael McNitt-Gray (UCLA); J. Webster Stayman (Johns Hopkins University); Grace J. Gang (Johns Hopkins University)
125	Focal Spot Design Optimization for High-Resolution CT	Yue Fan (Johns Hopkins University)*; Xiao Jiang (Johns Hopkins University); Grace Gang (University of Pennsylvania); Joseph Stayman (Johns Hopkins University)
60	Scatter Characteristic and LBTE-based Correction in Multi-source Dual-ring Stationary CT	Guoxi Zhu (Tsinghua University)*; Hwei Gao (Tsinghua University); Li Zhang (Tsinghua University); Yuxiang Xing (Tsinghua University); Changyu Chen (Tsinghua University); Zhiqiang Chen (Tsinghua University)

	Handling non-ideal conditions (incomplete data, metal, motion, rings, scatter)	Session chairs: K. Stierstorfer, S. Zabic
ID	Oral presentations (M3)	
42	Measurement-based Deep Scatter Estimation	Lukas Hennemann (German Cancer Research Center)*; Julien Erath (Siemens Healthineers AG); Andreas Heinkele (German Cancer Research Center); Eric Fournié (Siemens Healthineers AG); Martin Petersilka (Siemens Healthineers AG); Karl Stierstorfer (Siemens Healthineers AG); Marc Kachelrieß (German Cancer Research Center)
101	Preliminary investigation of motion-artifact suppression in image-guided radiation therapy of prostate cancer	Zheng Zhang (The University of Chicago)*; Bulent Aydogan (The University of Chicago); Erik Pearson (The University of Chicago);

		Dan Xia (The University of Chicago); Emil Sidky (The University of Chicago); Xiaochuan Pan (The University of Chicago)
59	Dynamic CT Chest Respiratory Motion Phantom with Lifelike 3D-Printed Deformable Lungs	Jessica Im (University of Pennsylvania)*; Michael Geagan (University of Pennsylvania); Sebastian Meyer (Memorial Sloan Kettering Cancer Center); Kai Mei (University of Pennsylvania); Peter Noel (University of Pennsylvania)
58	Tunable Metal-Artifact CT Phantoms via Dual-Filament 3D Printing	Pouyan Pasyar (University of Pennsylvania)*; Kai Mei (University of Pennsylvania); Jessica Im (University of Pennsylvania); Leonid Roshkovan (University of Pennsylvania); Michael Geagan (University of Pennsylvania); Peter Noel (University of Pennsylvania)
29	A Site-Agnostic Dual-Domain Deep Learning Reconstruction Framework for Nonstop Gated CBCT	Mitchell Yu (Memorial Sloan Kettering Cancer Center); Noah Silverberg (Memorial Sloan Kettering Cancer Center); Sean Berry (Memorial Sloan Kettering Cancer Center); Wendy Harris (Memorial Sloan Kettering Cancer Center); Jean Moran (Memorial Sloan Kettering Cancer Center); Lei Xing (Stanford University); Hao Zhang (Stanford University)*
	Poster Presentations (Monday)	
55	Differentiable Forward and Back Projectors for Gradient-Based Deformable Motion Estimation	Xiao Jiang (Johns Hopkins University)*; Grace Gang (University of Pennsylvania); Joseph Stayman (Johns Hopkins University)
65	Segmentation-free automatic geometry calibration method using a neural-network prediction model in CBCT	Sungho Yun (Korea Advanced Institute of Science and Technology)*, Seungryong Cho (Korea Advanced Institute of Science and Technology)
35	Image Reconstruction for Helical CBCT With a Laterally Shifted Flat-Panel Detector	Zhicong Yu (University of California, Santa Cruz)*, Amit Jain (formerly with Accuray Inc.), Chuanyong Bai (formerly with Accuray Inc.), Jacob Shea (Accuray Inc.), Daniel Cagnon (formerly with Accuray Inc.)
45	Normalized Metal Artifact Reduction using Physics-Inspired Deep Prior Images	Anton Kabelac (German Cancer Research Center)*; Marc Kachelrieß (German Cancer Research Center); Andreas Specovius (Siemens Healthineers)
76	Self-Operating Geometry Calibration for Cone-Beam Computed Tomography Using Bayesian Optimization	Jiyong Shim (Yonsei university)*; Hyosung Cho (Yonsei university)
68	Auxiliary Orbit Compensation for Cone-Beam Artifacts in CBCT	Zeyu Zhou* (Carl Zeiss X-ray Microscopy, Inc); Andriy Andreyev (Carl Zeiss X-ray Microscopy, Inc); Faguo Yang (Carl Zeiss X-ray Microscopy, Inc)
37	Comparison of Local Regression-Based Method for Removing Ring Artifacts in CT Images	Xiangyuan Liu (Southern University of Science and Tech)*; Xudong Ru (Beijing Normal University); Shusen Zhao (Southern University of Science and Tech)
33	DOCTOR: Physics-Constrained Flow Matching Method for Cone-Beam CT Reconstruction Under a Variety of Non-Ideal Imaging Conditions	Qiang Tang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Li Chen (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Haoxiang Hu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Jun Xiang (X-Ray Department, United Imaging Healthcare Limited Company); Dong Liang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Yinsheng Li (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)*
34	LAB-PhD: A Learnable Physics-Informed Diffusion Model for Spectral Cone Beam CT Imaging	Li Chen (Southeast University); Ruifeng Chen (Southeast University); Qiang Tang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences, and University of Chinese Academy of Sciences); Juan Feng (United Imaging Healthcare Limited Company); Jun Xiang (United Imaging Healthcare Limited Company); Xu Ji (Southeast University); Yang Chen (Southeast University); Dong Liang (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Yinsheng Li

		(Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences)*
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	Photon-counting CT	Session chairs: J. Star-Lack, M. Persson
ID	Oral presentations (T1)	
85	Dual-Contrast K-Edge Imaging on a Clinical PCCT: Influence of K-Edge Spacing	Martin Rybertt (University of Pennsylvania)*; Katie Villasenor (University of Pennsylvania); Nicole Mirzaian (University of Pennsylvania); Ryan Fair (University of Pennsylvania); Pooyan Sahbaee (Siemens Healthineers); Tristan Nowak (Siemens Healthineers AG); Leening Liu (University of Pennsylvania); Ali Dhanaliwala (University of Pennsylvania); David Cormode (University of Pennsylvania); Peter Noël (University of Pennsylvania)
8	Enable K-Edge Material Decomposition Without K-Edge Material Calibration: A Feasibility Study	Yirong Yang (United Imaging Healthcare North America)*; Wenying Wang (United Imaging Healthcare North America)
105	A Digital Twin of Photon-Counting CT System	Ruiran Lai (University of Wisconsin-Madison)*; Ran Zhang (University of Wisconsin-Madison); Linying Zhan (University of Wisconsin-Madison); Roy Nilsen (GE Healthcare); Tyler Curtis (GE Healthcare); Xiaopeng Yu (University of Wisconsin-Madison); Brian Yanoff (GE Healthcare); Bruno De Man (GE Healthcare); Ke Li (University of Texas MD Anderson Cancer Center); Guang-Hong Chen (University of Wisconsin-Madison)
22	Combining Poisson random variables to generate and analyze the statistics of photon counting detectors	Karl Stierstorfer (Siemens Healthineers)*
12	Spectral performance comparison of counting schemes for photon counting x-ray detectors with anti-scatter grids	Katsuyuki Taguchi (Johns Hopkins University)*; Patrick Riehl (Analog Devices); Scott Hsieh (Mayo Clinic)
	Poster Presentations (Monday)	
81	Extension of an Open and Vendor-neutral DICOM-CT-PD Format for Photon-Counting-Detector CT	Zhongxing Zhou (Mayo Clinic)*; Scott Hsieh (Mayo Clinic); Jarod Wellinghoff (Mayo Clinic); Solveig Narum (Mayo Clinic); Cynthia McCollough (Mayo Clinic); Lifeng Yu (Mayo Clinic)
113	Design and Characterization of the Pyxis™ X-Ray Detection Platform for CdTe- and CZT-based Photon-Counting Computed Tomography	Josh Star-Lack (Varex Imaging Corp)*, Mattias Urech (Varex Imaging Corp), Devang Savaliya (Varex Imaging Corp), Simo Veijola (Varex Imaging Corp), Henrik Lohman (Varex Imaging Corp), Fredrik Reinholdsen (Varex Imaging Corp), Kyle Holland (Varex Imaging Corp), Kevin Holt (Varex Imaging Corp), Steve Hoelzer (Varex Imaging Corp), Alex Stewart (Varex Imaging Corp), Mark Dinh (Varex Imaging Corp), Thomas Frach (Varex Imaging Corp), Ivan Mollov (Varex Imaging Corp), Tuomas Panssar (Varex Imaging Corp), Christer Ullberg (Varex Imaging Corp), Richard Colbeth (Varex Imaging Corp)
129	Material-Aware Pulse Pile-Up And Pixel Gain Correction for Spectral Photon Counting Detectors	Simo Veijola (Varex Imaging Corp); Kyle Holland (Varex Imaging Corp); Henrik Lohman (Varex Imaging Corp); Fredrik Reinholdsen (Varex Imaging Corp); Mattias Urech (Varex Imaging Corp); Alex Stewart (Varex Imaging Corp); Devang Savaliya (Varex Imaging Corp); Richard Colbeth (Varex Imaging Corp); Josh Star-Lack (Varex Imaging Corp)*
49	Inter-institutional consistency of spectral results from a clinical photon-counting CT: effects of tube voltage and radiation dose level	Leening Liu (University of Pennsylvania)*; Martin Rybertt (University of Pennsylvania); Peter Noël (University of Pennsylvania); Liqiang Ren (UT Southwestern Medical Center); Xinhui Duan (UT Southwestern Medical Center); Kishore Rajendran (Mayo Clinic); Di Zhang (University of California, Los Angeles); Grace Kim (University

		of California, Los Angeles); Michael McNitt-Gray (University of California, Los Angeles)
86	Quantitative Gadolinium K-edge Imaging of Hepatobiliary Excretion Using Clinical PCCT: An In Vivo Study	Martin Rybertt (University of Pennsylvania)*; Leening Liu (University of Pennsylvania); George McClung (University of Pennsylvania); Pooyan Sahbaee (Siemens Healthineers); Tristan Nowak (Siemens Healthineers AG); Manoj Mathew (University of Pennsylvania); Peter Noël (University of Pennsylvania); Ali Dhanaliwala (University of Pennsylvania)
41	Water Beam Hardening and Pulse Pileup Correction with Small Neural Networks	Jannik Dettmer (Siemens Healthineers)*; Julien Erath (Siemens Healthineers); Matthias Baer-Beck (Siemens Healthineers); Juliane Szkitsak (University Hospital Erlangen, Radiation Clinic); Karl Stierstorfer (Siemens Healthineers); Christoph Bert (University Hospital Erlangen, Radiation Clinic)
52	Comparison of SIRT and FBP Reconstruction Methods for Material Characterization in Photon-Counting CT: a Monte Carlo Study	Gustavo Silva (University of Sao Paulo); Renan Santos (University of Sao Paulo); Alessandra Tomal (University of Campinas); Gisell Boiset (University of Sao Paulo); Paulo Costa (University of Sao Paulo)*
83	Physics-Augmented Simulation of Deep Silicon Photon Counting Detector	Haomin Hou (Southern Medical University)*; Jiabing Sheng (Sun Yat-sen University Cancer Center); Yankun Wang (Southern Medical University); Yule Li (Southern Medical University); Junhao Wu (Southern Medical University); Deyang Kong (Southern Medical University); Jingyi Liao (Southern Medical University); Hao Wang (Southern Medical University); Zhaoying Bian (Southern Medical University); Jianhua Ma (Xi'an Jiaotong University); Dong Zeng (Southern Medical University)
40	Bias and Noise Problems in Spectral Photon-counting CT Imaging Task at Low-count Conditions	Jia Wei (Johns Hopkins University)*; Karl Stierstorfer (Siemens Healthineers); George Fung (Siemens Healthineers); Christoph Polster (Siemens Healthineers); Katsuyuki Taguchi (Johns Hopkins University School of Medicine)

	Beyond absorption X-ray imaging	X. Tang, P. Noel
ID	Oral presentations (T2)	
84	Neighbor2Inverse: Self-Supervised Denoising for Low-Dose Region-of-Interest Phase Contrast CT	Johannes Thalhammer (Technical University of Munich)*; Lorenzo D'Amico (Monash University); Lucy Costello (Monash University); Sebastian Peterhansl (Technical University Munich); Tina Dorosti (Technical University Munich); Florian Schaff (Technical University Munich); Jannis Ahlers (Monash University); Ronan Smith (University of Adelaide); Marcus Kitchen (Monash University); Franz Pfeiffer (Technical University Munich); Martin Donnelley (University of Adelaide); Daniela Pfeiffer (TUM Klinikum); Kaye Morgan (Monash University)
82	Bridging the Simulation-to-Reality Gap in Snapshot CAXRDT: A Confidence-Guiding Fine-Tuning Approach	Shengzi Zhao (Tsinghua University)*; Donghang Miao (Tsinghua University); Yuxiang Xing (Tsinghua University)
97	Geometric Calibration for X-ray Fluorescence Tomography using Multi-Support Consistency	Meo van Duijnen Montijn (ESRF - The European Synchrotron Radiation Facility)*; Jérôme Lesaint (ESRF - The European Synchrotron Radiation Facility); Jean Michel Létang (INSA Lyon, Université Claude Bernard Lyon 1, CNRS, Inserm, CREATIS UMR 5220, U1294); Simon Rit (INSA Lyon, Université Claude Bernard Lyon 1, CNRS, Inserm, CREATIS UMR 5220, U1294)
	Poster presentations (Monday)	
122	X-ray Dark-field Imaging of Iron Oxide Nanorods for Instantaneous DSA (iDSA)	Xiangyang Tang (Emory University School of Medicine)*; Yi Yang (Emory University School of Medicine); Duhee Joen (Emory

		University School of Medicine); Huiqiao Xie (Emory University School of Medicine); Hui Mao (Emory University School of Medicine)
95	Structured Loss Amplification for U-Net-based Human-scale Dark-field CT Streak Reduction	Daniel Frey (TUM)*; Tina Dorosti (TUM); Johannes Thalhammer (TUM); Josepha Hilmer (TUM); Paulina Bleuel (TUM); Theresa Hiu (TUM); Sebastian Peterhansl (TUM); Julian McGinnis (TUM); Thomas Koehler (Philips GmbH Innovative Technologies); Daniela Pfeiffer (TUM); Franz Pfeiffer (TUM); Daniel Rueckert (TUM); Florian Schaff (TUM)
74	Streak Artifact Reduction in Human-scale Dark-field CT Using 3D Gaussian Splatting	Tina Dorosti (TUM)*; Daniel Frey (TUM); Johannes Thalhammer (TUM); Josepha Hilmer (TUM); Paulina Bleuel (TUM); Sebastian Peterhansl (TUM); Julian McGinnis (TUM); Daniela Pfeiffer (TUM); Franz Pfeiffer (TUM); Daniel Rueckert (TUM); Florian Schaff (TUM)
50	Beam Hardening Correction for Dark-Field Imaging in a Human-Scale CT Prototype	Lennard Kayser (Technical University of Munich)*; Daniel Frey (Technical University of Munich); Josepha Hilmer (Technical University of Munich); Sofia Demianova (Technical University of Munich); Tina Dorosti (Technical University of Munich); Maximilian Lochschmidt (Technical University of Munich); Thomas Koehler (Philips Innovative Technologies); Daniela Pfeiffer (Technical University of Munich); Franz Pfeiffer (Technical University of Munich)
102	Simulation Study of Scatter Rejection in Time-of-Flight CT	Altea Lorenzon (Johns Hopkins University)*; Xiao Jiang (Johns Hopkins University); J. Webster Stayman (Johns Hopkins University)

	Image quality, radiomics & dose	P. Costa, S. Leng
ID	Oral presentations (T3)	
48	Incorporating Tube Current Latency in Organ Risk-Based CT Tube Current Modulation	Catherine Knobloch (DKFZ)*; Philipp Oelze (DKFZ); Andreas Prokein (Siemens Healthineers AG); Michael Grasruck (Siemens Healthineers AG); Matthias Baer-Beck (Siemens Healthineers AG); Marc Kachelrieß (DKFZ)
112	Low Contrast Detectability Performance in a Realistic Anthropomorphic 3D Printed Phantom vs standard QA phantoms	Daniel Shin (Canon Medical Systems Corporation)*; Leening Liu (University of Pennsylvania); Jessica Im (University of Pennsylvania); Tomoe Hagio (Canon Medical Systems Corporation); Bernice Hoppel (Canon Medical Systems USA); Amar Dhanantwari (Canon Medical Systems USA); Peter Noel (University of Pennsylvania); Kirsten Boedeker (Canon Medical Systems Corporation)
66	Risk-Minimizing Tube Current Modulation Compared to Clinical Protocols	Philipp Oelze (German Cancer Research Center)*; Aniol Serra Juhe (University of Erlangen-Nuremberg); Daniel Mosig (University of Erlangen-Nuremberg); Michael Knaup (German Cancer Research Center); Michael Lell (Klinikum Nürnberg); Andreas Maier (University of Erlangen-Nuremberg); Marc Kachelrieß (German Cancer Research Center)
92	The Information Cliff: Testing the Physical Limits of Quantitative Imaging	John Hoffman (UCLA Radiology)*
20	Mean Squared Error, Structure Similarity, and Channelized Hotelling Observer Study in Machine Learning	Larry Zeng (Utah Valley University)*
	Poster presentations (Monday)	
57	Task-Based Modeling of Pulmonary Nodule Detectability in CT	Elsa Pimenta (University of Sao Paulo); Gisell Boiset (University of Sao Paulo); Luuk Oostveen (Radboud University Medical Center); Ioannis Sechopoulos (Radboud University Medical Center); Alessandra Tomal (University of Campinas); Paulo Costa (University of Sao Paulo)*

46	Deep Learning Enhancement of Ultralow-Dose 3D CT Scouts for Organ Localization and Dose	Liyan Sun (Stanford University)*; Sen Wang (Stanford University); Maria Jose Medrano (Stanford University); Kaylee Fang (Stanford University); Grant Stevens (GE Healthcare); Justin Tse (Stanford University); Adam Wang (Stanford University)
56	Physics-Informed Scalable CycleGAN for CT Reconstruction Kernel Conversion and Harmonization	Seoyoung Lee (Mayo Clinic)*; Aeden Davis (Mayo Clinic); Shravani Kharat (Mayo Clinic); Wilson Gonsalves (Mayo Clinic); Shuai Leng (Mayo Clinic); Lifeng Yu (Mayo Clinic); Cynthia McCollough (Mayo Clinic); Francis Baffour (Mayo Clinic); Hao Gong (Mayo Clinic)
75	A practical model observer for a task-based image quality assessment based on a local hypothesis test	Okkyun Lee (DGIST)*
44	GrainNet: An Unsupervised Framework for Frequency-Dependent Higher-Order Noise Modeling in CT	Ou Li (Radboud University Medical Center)*; Kirsten Boedeker (Canon Medical Systems Corporation); Tomoe Hagio (Canon Medical Systems Corporation); Daniel Shin (Canon Medical Systems Corporation); Koen Michielsen (Radboud University Medical Center); Luuk Oostveen (Radboud University Medical Center); Ioannis Sechopoulos (Radboud University Medical Center)
96	CT Reconstruction from Dual-View Depth Images and Topograms for Prospective Risk Minimization	Aniol Serra Juhé (Pattern Recognition Lab, FAU Erlangen-Nuremberg)*; Daniel Mosig (Pattern Recognition Lab, FAU Erlangen-Nuremberg); Chang Liu (Erlangen National High Performance Computing Center (NHR@FAU), FAU Erlangen-Nuremberg); Philipp Oelze (Division of X-Ray Imaging and Computed Tomography, German Cancer Research Center, Heidelberg, Germany and Ruprecht-Karls-University, Heidelberg, Germany); Michael Lell (Department of Radiology and Nuclear Medicine, Klinikum Nuremberg, Paracelsus Medical University, Nuremberg, Germany); Marc Kachelriess (Division of X-Ray Imaging and Computed Tomography, German Cancer Research Center, Heidelberg, Germany and Ruprecht-Karls-University, Heidelberg, Germany); Andreas Maier (Pattern Recognition Lab, FAU Erlangen-Nuremberg)

	NDT & Dental Imaging	Session chairs: S. Cho, J. Lesaint
ID	Oral presentations (T4)	
51	In-house nano-xCT with an x-ray spectrometer and a hybrid photon counting detector for integrated circuit metrology	Jordan Fonseca (National Institute of Standards and Technology)*
25	DBP-based geometry-robust artifact removal for rotational CL	Wuliang Shi (Tsinghua University)*; Yuxiang Xing (Tsinghua University); Changyu Chen (Tsinghua University)
127	Simulation of tire phantom based on X-ray computed tomography	Jiaying Zhang (University of California, Santa Cruz); Zhencheng Lin (University of California, San Diego); Zhicong Yu (University of California, Santa Cruz)*
123	An iterative filtered-backprojection algorithm to exactly and stably solve the long object problem in cone-beam CT with source positions evenly distributed on a cylinder	Murdock Grewar (Australian National University)*, Frederic Noo, (University of Utah)
	Poster presentations (Wednesday)	
63	Practical Dental CBCT Reconstruction under Truncated Projections	Kiwan Jeon (National Institute for Mathematical Sciences)*; Hyoung Suk Park (National Institute for Mathematical Sciences)
26	Two-Stage Cascaded Caries Detection on Panoramic X-Ray via Slicing-Aided Hyper Inference	Subin Park (Yonsei University)*; Yoonha Eo (Yonsei University); Jongduk Baek (Yonsei University)

77	X-ray CT based Anomaly Detection by Pseudo-Volumetric Reconstruction with Channel-Disentangled Memory	Yunkun Bai (Tsinghua University); Xiang Zou (Tsinghua University); Yuxiang Xing (Tsinghua University)*
118	Pulsed X-ray micro-CT for minimizing non-contributory irradiation during scanning	Takayuki Okamoto (Chiba University)*; Yuki Morimoto (Chiba University); Hideaki Haneishi (Chiba University)
103	Quantitative measurement of 3D resolution in cone beam CT using touching spheres	Matthew Andrew (Zeiss)*; Konrad Lingel (Zeiss); Johannes Schuele (Zeiss)
38	SynthCaries: Dental Caries Generation on Panoramic Radiograph using Diffusion	Yoonha Eo (Yonsei University); Eunmin Lee (Yonsei University)*; Jongduk Baek (Yonsei University)
71	Gradient Step Plug-and-Play Model for Dental Cone-Beam CT Reconstruction	Idris Tatachak (CREATIS, Acteon Group)*; Luis Kabongo (Acteon Group); Nicolas Papadakis (Univ. Bordeaux, IMB); Xavier Ripoche (Acteon Group); Simon Rit (CREATIS)
94	Super-Resolution μ CT of Complete Pathological Tarsal Bones	Sascha Senck (University of Applied Sciences Upper Austria)*; Lukas Nepelius (University of Applied Sciences Upper Austria); Johann Kastner (University of Applied Sciences Upper Austria); Jonathan Glinz (University of Applied Sciences Upper Austria); Klemens Trieb (Paracelsus Medical University); Elena Kranjoti (University of Crete); Bernhard Plank (University of Applied Sciences Upper Austria); Patrick Weinberger (University of Applied Sciences Upper Austria)

W1	Angiographic, cardiac & high-resolution imaging	Session chairs: K. Taguchi, J. Maier
ID	Oral presentations (W1)	
98	Clinical Feasibility of Fully Autonomous Cardiac CT Using Pulsed Mode Projections	Pengwei Wu (GE HealthCare)*; Eri Haneda (GE Healthcare); Isabelle Heukensfeldt Jansen (GE Healthcare); Stephen Araujo (GE Healthcare); Albert Hsiao (University of California San Diego); Elliot McVeigh (University of California San Diego); Bruno De Man (GE Healthcare)
39	Mixed Prior Diffusion Posterior Sampling for High Resolution CT Reconstruction	Peiqing Teng (Johns Hopkins University)*; Xin Wang (Johns Hopkins University); Jian Zhou (Canon Medical Research USA, Inc.); Liang Cai (Canon Medical Research USA, Inc.); Tzu-Cheng Lee (Canon Medical Research USA, Inc.); Ruoqiao Zhang (Canon Medical Research USA, Inc.); J. Webster Stayman (Johns Hopkins University)
108	Diffusion Posterior Sampling for Angiographic Reconstruction using Limited Angle and Sparse View data for 4D-DSA	Shudong Li (Johns Hopkins University)*; Suyu Liao (University of Pennsylvania); Peiqing Teng (Johns Hopkins University); Webster Stayman (Johns Hopkins University); Grace Gang (University of Pennsylvania)
99	Deep Learning Deblooming in Coronary CT Angiography with CatSim Training Data	Muhan Shao (GE HealthCare)*; Christopher Wiedeman (GE HealthCare); Lin Fu (GE HealthCare); Ge Wang, (Department of Biomedical Engineering, Rensselaer Polytechnic Institute, New York, USA), Bruno De Man (GE HealthCare)
13	Cardiac Coronary CT Angiography Image Quality Enhancement with Multi-Vendor Generalizability using Deep Learning-based High-resolution and Multi-energy Imaging	Shaojie Chang (Mayo Clinic)*; Maryam Sadeghian (Mayo Clinic); Benjamin Wilson (Mayo Clinic); Eric Williamson (Mayo Clinic); Thomas Foley (Mayo Clinic); Cynthia McCollough (Mayo Clinic); Shuai Leng (Mayo Clinic)
	Poster presentations (Wednesday)	
27	An Accurate and Real-Time 3D/2D Coronary Artery Registration Method for Depth-Guided Coronary Intervention Navigation	Ruifeng Chen (Shenzhen Institutes of Advanced Technology Chinese Academy of Sciences); Zhongwei Sun (Fuwai Hospital); Lei Song (Fuwai Hospital); Mengxuan Yuan (Department of Radiology, Jiangdu People' s Hospital of Yangzhou); Jun Xiang (United Imaging Healthcare Limited Company); Yang Chen (Southeast University); Dong Liang (Shenzhen Institutes of Advanced Technology Chinese

		Academy of Sciences); Yinsheng Li (Shenzhen Institutes of Advanced Technology Chinese Academy of Sciences)*
116	Diffusion Model-Based Motion Compensation for Coronary CT Angiography in Dual Wide-Detector CT	Zhiyang Fu (United Imaging Healthcare, North America)*; Jiao Tian (Shanghai United Imaging Healthcare); Xi Zhang (Shanghai United Imaging Healthcare); Yifu Mao (Shanghai United Imaging Healthcare); Wenjing Cao (Shanghai United Imaging Healthcare); Guotao Quan (Shanghai United Imaging Healthcare); Wenying Wang (United Imaging Healthcare North America)
72	NERVE: A Near-Real-Time Three-Dimensional Reconstruction Approach for Interventional Devices and Surrounding Vessels Using a Monoplane C-arm Cone-Beam CT	Yang Liu (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Zexi Sun (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Bingshuai Zhao (X-Ray Department, United Imaging Healthcare Limited Company); Yikun Zhang (Key Laboratory of New Generation Artificial Intelligence Technology and Its Interdisciplinary Applications, Southeast University); Yang Chen (Key Laboratory of New Generation Artificial Intelligence Technology and Its Interdisciplinary Applications, Southeast University); Yinsheng Li (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences)*
80	Coronary Mask-Guided Registration for 4D Cardiac CT Dataset Construction	Yuang Wang (Tsinghua University)*; Shuo Wang (Tsinghua University); Changyu Chen (Tsinghua University); Le Shen (Tsinghua University); Yunqiang An (Fuwai Hospital); Yang Gao (Fuwai Hospital); Bin Lu (Fuwai Hospital); Dongrui Dai (Tsinghua University); Muge Du (Tsinghua University); Li Zhang (Tsinghua University); Zhiqiang Chen (Tsinghua University)
32	PC-FLOW: A Physics-Constrained Conditional Flow Matching Model For High Pitch Helical Three Dimensional Digital Subtraction Angiography	Yi Liu (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Ruifeng Chen (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Zexi Sun (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Canzhen Ma (United Imaging Healthcare Limited Company); Jun Xiang (United Imaging Healthcare Limited Company); Dong Liang (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences); Yinsheng Li (Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences)*
70	A Framework for Ultra-High-Resolution CT via Data Synthesis and Latent Diffusion Bridge	Sun Yang (Tsinghua University)*; Zhang ShaoYang (Tsinghua University); Zhang Li (Tsinghua University)
69	Five-Dimensional Coronary Angiography Using Topology-Constrained Contrast-Motion Joint Gaussian Modeling	Yao Wang (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Ruifeng Chen (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Jun Xiang (X-Ray Department, United Imaging Healthcare Limited Company, Shanghai, China); Lei Song (Fuwai Hospital, CAMS & PUMC); Yang Chen (Key Laboratory of New Generation Artificial Intelligence Technology and Its Interdisciplinary Applications, Southeast University, Nanjing, China); Dong Liang (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences); Yinsheng Li (Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences)*
121	Deep Low-Rank Subspace Learning for 5D Myocardial Perfusion Photon-Counting CT Denoising	Meng Xiao (Biomedical Engineering, Southern Medical University)*; Xiao Meng (Biomedical Engineering, Southern Medical University); Jiangjun Peng (Mathematics and Statistics, Northwestern Polytechnical University); Jingyi Liao (Biomedical Engineering, Southern Medical University); Yue Liu (Biomedical Engineering, Southern Medical University); Hao Wang (Biomedical Engineering, Southern Medical University); Zhaoying Bian (Biomedical Engineering, Southern Medical University); Jianhua Ma (Life Science and Technology, Xi'anJiaotong University); Dong Zeng (Biomedical Engineering, Southern Medical University)

	Limited angle & sparse view imaging	Session chairs: S. Vedantham, K.Michielsen
ID	Oral presentations (W2)	
15	Accelerating Low-Frequency Convergence for Limited-Angle DBT via Two-Channel Fidelity in PDHG	Taro Iyadomi (DNE); Ricardo Parada (DNE); Anna Kim (UCSD); Lily Jiang (UCLA); Emil Sidky (University of Chicago); William Chang (UCLA)*
67	Unified Analysis of Uniqueness and Stability for Interior and Exterior Problems in Tomographic Image reconstruction	Katsuya Fujii (Kio University)*; Hiroyuki Kudo (University of Tsukuba)
54	Anisotropic Total Variation Regularization for Artifact Reduction in Contrast-Enhanced Digital Breast Tomosynthesis using PDHG Optimization	Yixin Li (Stony Brook University)*; Xiangyi Wu (Stony Brook University); Emil Sidky (The University of Chicago); Wei Zhao (Stony Brook University)
111	Basis material image reconstruction for digital breast tomosynthesis using a single kV scan	JP Phillips (The University of Chicago)*; Emil Sidky (The University of Chicago); Ingrid Reiser (The University of Chicago); Zheng Zhang (The University of Chicago); Buxin Chen (The University of Chicago); Xiaochuan Pan (The University of Chicago)
	Poster presentations (Wednesday)	
106	Robust Limited-Angle CT Reconstruction via Geometry-Conditioned Multi-Environment Learning	Shujie Jin (University of Wisconsin-madison)*; Zilin Jiang (University of Wisconsin-madison); Ran Zhang (University of Wisconsin-madison); Guang-Hong Chen (University of Wisconsin-madison)
21	Bayesian Regulators to Promote Sharp Image Edges in Limited-Angle Tomography	Larry Zeng (Utah Valley University)*
73	Efficient Projection Correction Approach for High-Density Object Artifact Reduction in Digital Breast Tomosynthesis	Subong Hyun (KAIST)*; Seoyoung Lee (mayo clinic); Seungryong Cho (KAIST)
110	Prior-Embedded Implicit Neural Representation and Dual-Domain Ordered-Subsets for High-Resolution Limited-Angle Non-Coplanar CBCT Imaging	Siqi Ye (Mayo Clinic)*; Yu Gao (Stanford University); Hao Zhang (Stanford University); Lei Xing (Stanford University)
107	Correction Strategies for Material Decomposition in Dual-Energy Digital Breast Tomosynthesis for Cyst-Solid Mass Differentiation	Martina Nassi (Radboud University Medical Center)*; Koen Michielsen (Radboudumc); Ioannis Sechopoulos (Radboudumc)
117	Memory-efficient optimization of implicit neural representations for CT reconstruction	Mahrokh Najaf (Marquette University); Greg Ongie (Marquette University)*
23	Limited-Angle CT Reconstruction via Conditional Adversarial Diffusion with Dynamic Multi-Scale Injection	Yutong He (National Center for Applied Mathematics Shenzhen, Southern University of Science and Technology)*; Dimeng Xia (National Center for Applied Mathematics Shenzhen, Southern University of Science and Technology); Shusen Zhao (National Center for Applied Mathematics Shenzhen, Southern University of Science and Technology); Detection Institute for Advanced Technology Longhua-Shenzhen)
64	Ensemble learning of different diffusion priors for sparse view CT reconstruction	Sho Ozaki (Hirosaki University)*; Shizuo Kaji (Kyoto University); Toshikazu Imae (University of Tokyo Hospital); Kanabu Nawa (Osaka Medical and Pharmaceutical University); Hideomi Yamashita (University of Tokyo Hospital); Keiichi Nakagawa (University of Tokyo Hospital)

	Addressing noise, low dose & material decomposition	Session chairs: F. Jolivet, Y. Xing
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ID	Oral presentations (W3)	
53	Addressing noise and resolution non-uniformities in fully 3D axial CT reconstruction	Stanislav Zabic (Philips)*; Kevin M. Brown (Philips)
61	MeanFlow Posterior Sampling for Low-Dose Head CT Reconstruction	Dufan Wu (The Ohio State University)*; Yuang Wang (Tsinghua University); Matthew Tivnan (Massachusetts General Hospital and Harvard Medical School); Quanzheng Li (Massachusetts General Hospital and Harvard Medical School)
114	Median2Median: Zero-shot Suppression of Structured Noise in CT Images	Jianxu Wang (Rensselaer Polytechnic Institute)*; Wenjun Xia (Rensselaer Polytechnic Institute); Mannudeep Kalra (Massachusetts General Hospital); Ge Wang (Rensselaer Polytechnic Institute)
91	Joint Spectrum Estimation and Material Decomposition for One-kVp-switching Dual-energy CBCT: A Pre-clinical Study	Yu Gao (UT Southwestern Medical Center); Tingliang Zhuang (UT Southwestern Medical Center); You Zhang (UT Southwestern Medical Center)*
43	Enhancing Pediatric Dual-Layer Spectral CT Quantification Using K-Edge Filtration: Experimental Study	Yinglin Ge (University of Pennsylvania)*; Olivia Sandvold (University of Pennsylvania); Roland Proksa (University of Pennsylvania); Amy Perkins (Philips Healthcare); Thomas Koehler (Philips Innovative Technologies); Heiner Daerr (Philips Innovative Technologies); Yannan Jin (Philips Healthcare); Kevin Brown (Philips Healthcare); Leening Liu (University of Pennsylvania); Peter Noël (University of Pennsylvania)
	Poster presentations (Wednesday)	
115	Dual-Domain Posterior Mean-Guided Diffusion Bridge Model for Sparse-View CT Reconstruction	Xun Zhang (Tsinghua University)*; Hewei Gao (Tsinghua University); Li Zhang (Tsinghua University); Yuxiang Xing (Tsinghua University); Changyu Chen (Tsinghua University); Zhiqiang Chen (Tsinghua University)
104	Causal Statistical Foundations and Causal Invariance Learning for Material Basis Estimations from Single-kV CT Images	Zilin Jiang (University of Wisconsin-Madison)*; Ran Zhang (University of Wisconsin-Madison); Yijing Wu (University of Wisconsin-Madison); Shujie Jin (University of Wisconsin-Madison); Zhihua Qi (Henry Ford Health); Ke Li (MD Anderson Cancer Center); Guang-Hong Chen (University of Wisconsin-Madison)
47	Data-Driven Linearization of the Spectral CT Forward Model using Gaussian Mixture Models	Gauthier Multari (CREATIS - THALES)*; Guillaume Delorme (THALES); Frédéric Jolivet (THALES); Simon Rit (CREATIS - CNRS)
100	The Sufficiency of Material Bases in Polychromatic CT: A Quantitative Effective Energy Perspective	Xiaopeng Yu (University of Wisconsin-Madison)*; Ran Zhang (University of Wisconsin-Madison); Guang-Hong Chen (University of Wisconsin-Madison)
87	Physics-Informed Adaptive Filtering Based on VVBP τ -Coordinate Properties for Low-Dose CT Image Recovery	Junhao Wu (Southern Medical University)*; Yuanxiang Gao (Southern Medical University); Haomin Hou (Southern Medical University); Deyang Kong (Southern Medical University); Yankun Wang (Southern Medical University); Yule Li (Southern Medical University); Jingyi Liao (Southern Medical University); Hao Wang (Southern Medical University); Zahoying Bian (Southern Medical University); Jianhua Ma (Xi'an Jiaotong University); Dong Zeng (Southern Medical University)
24	WICD: Wavelet-Informed Conditional Diffusion Model for Low-Dose CT Denoising	Changsheng Fang (University of Massachusetts Lowell)*; Bahareh Morovati (University of Massachusetts Lowell); Shuo Han (University of Massachusetts Lowell); Yu Shi (University of Massachusetts Lowell); Li Zhou (University of Massachusetts Lowell); Shuyi Fan (University of Massachusetts Lowell); Dayang Wang (University of Massachusetts Lowell); Hengyong Yu (University of Massachusetts Lowell)
17	Noise and Anatomy Adaptive Convolution for Efficient Low-Dose CT Denoising	Minwoo Yu (Yonsei University)*; Jongduk Baek (Yonsei University); Adam Wang (Stanford University)

62	Lag-Induced Spectral Contamination in Spectral CBCT: A Comparative Study of Fast kV-Switching and Dual-Layer Flat-Panel Detector Technologies	Yuting Chen (Tsinghua University)*; Hao Zhou (Tsinghua University); Hwei Gao (Tsinghua University)
119	Low-Dose CT Image Denoising Using Data-Coupled Flow Matching	Bangyan Huang (University of California, Davis); Jinyi Qi (University of California, Davis); Jian Zhou (Canon Medical Research USA)*
36	Application of UNet-Based Network for Projection-Domain Material Decomposition in CBCT, A Simulation Study	Yuedong Yuan (STIMULATE, Otto-von-Guericke University)*, Daniel Punzer (STIMULATE, Otto-von-Guericke University), Georg Rose (STIMULATE, Otto-von-Guericke University)
124	Enhancing Reproducibility for CT-based Radiomics: A Pragmatic Approach to Mitigate the Impact of Reconstruction Kernel Variations	Yun-Huan Lyu (University of Washington)*; Wei Wu (University of Washington); Yuzheng Zhang (Fred Hutchinson Cancer Center); Paul Kinahan (University of Washington)