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Jiang Hsieh
Michael J. Flynn
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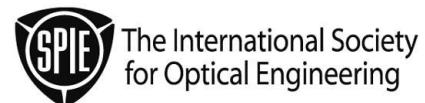
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Contents

Part One

xxv *Conference Committee*

SESSION 1 KEYNOTE

- 651002 **Statistical characterization of radiological images: basic principles and recent progress (Keynote Paper)** [6510-01]
H. H. Barrett, College of Optical Sciences, Univ. of Arizona (USA); K. J. Myers, Food and Drug Administration (USA)
- 651003 **Intensity-modulated fluence patterns for task-specific imaging in cone-beam CT** [6510-02]
S. A. Graham, J. H. Siewerdsen, Univ. of Toronto (Canada) and Ontario Cancer Institute (Canada); D. A. Jaffray, Univ. of Toronto (Canada), Ontario Cancer Institute (Canada), and Princess Margaret Hospital (Canada)
- 651004 **Observer evaluation of a method for producing simulated mammograms** [6510-03]
M. R. Chinander, R. M. Nishikawa, P. Seifi, The Univ. of Chicago (USA)

SESSION 2 DUAL ENERGY

- 651005 **Dual-energy technique for digital flat-panel detectors without x-ray tube voltage switching** [6510-04]
C. S. Coello, J.-M. Dinten, M. Arques, CEA-LETI-MINATEC (France); P. Rohr, Trixell (France); C. Odet, CREATIS (France)
- 651006 **Development and implementation of a high-performance cardiac-gated dual-energy imaging system** [6510-05]
N. A. Shkumat, Univ. of Toronto (Canada); J. H. Siewerdsen, Univ. of Toronto (Canada) and Ontario Cancer Institute (Canada); A. C. Dhanantwari, D. B. Williams, Ontario Cancer Institute (Canada); S. Richard, D. J. Tward, Univ. of Toronto (Canada); N. S. Paul, Princess Margaret Hospital (Canada); J. Yorkston, R. Van Metter, Eastman Kodak Co. (USA)

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The CID number appears on each page of the manuscript. The complete citation is used on the first page, and an abbreviated version on subsequent pages.

- 651007 **Dual-energy subtraction for contrast-enhanced digital breast tomosynthesis** [6510-06]
A.-K. Carton, Univ. of Pennsylvania (USA); K. Lindman, C. Ullberg, T. Francke, XCounter AB (Sweden); A. D. A. Maidment, Univ. of Pennsylvania (USA)
- 651008 **Image-domain material decomposition using photon-counting CT** [6510-07]
K. Taguchi, M. Zhang, E. C. Frey, J. Xu, Johns Hopkins Univ. (USA); W. P. Segars, Duke Univ. (USA); B. M. W. Tsui, Johns Hopkins Univ. (USA)
- 651009 **Atomic number resolution for three spectral CT imaging systems** [6510-08]
J. E. Tkaczyk, R. Rodrigues, J. Shaw, J. Short, Y. Du, X. Wu, D. Walter, Rose Hulman Institute of Technology (USA); W. Leue, D. Harrison, P. Edic, General Electric Research (USA)
- 65100A **Investigation of the use of photon counting x-ray detectors with energy discrimination capability for material decomposition in micro-computed tomography** [6510-09]
E. C. Frey, X. Wang, Y. Du, K. Taguchi, J. Xu, B. M. W. Tsui, Johns Hopkins Univ. (USA)

SESSION 3 PERFORMANCE ASSESSMENT

- 65100B **A method to estimate the point response function of digital x-ray detectors from edge measurements** [6510-10]
I. S. Kyrianiou, A. Badano, B. D. Gallas, K. J. Myers, NIBIB/CDRH Lab. for the Assessment of Medical Imaging Systems/FDA (USA)
- 65100C **The variability of software scoring of the CDMAM phantom associated with a limited number of images** [6510-11]
C.-Y. J. Yang, R. Van Metter, Eastman Kodak Co. (USA)
- 65100D **Spatial resolution of x-ray tomosynthesis in relation to computed tomography for coronal/sagittal images of the knee** [6510-12]
M. J. Flynn, R. McGee, J. Blechinger, Henry Ford Health System (USA)
- 65100E **Development of the 4D Phantom for patient-specific end-to-end radiation therapy QA** [6510-13]
K. Malinowski, C. Noel, W. Lu, K. Lechleiter, J. Hubenschmidt, D. Low, P. Parikh, Washington Univ. School of Medicine (USA)
- 65100F **Anisotropic point spread function of cone-beam computed tomography** [6510-14]
Z. Chen, Northeastern Univ. (China); R. Ning, Univ. of Rochester (USA)

SESSION 4 INNOVATIVE IMAGING I

- 65100G **Simultaneous x-rays/optical tomography of small animals** [6510-15]
A. Da Silva, M. Leabad, T. Bordy, J.-M. Dinten, P. Peltié, P. Rizo, LETI-CEA MINATEC (France)
- 65100H **Multi-source inverse geometry CT: a new system concept for x-ray computed tomography** [6510-16]
B. De Man, S. Basu, D. Bequé, B. Claus, P. Edic, M. Iatrou, J. LeBlanc, GE Global Research (USA); B. Senzig, GE Healthcare (USA); R. Thompson, M. Vermilyea, C. Wilson, Z. Yin, GE Global Research (USA); N. Pelc, Stanford Univ. (USA)

- 65100I **Compact multi-spectral imaging system for dermatology and neurosurgery** [6510-17]
H. J. Noordmans, R. de Roode, R. Verdaasdonk, Univ. Medical Ctr. Utrecht (Netherlands)
- 65100J **Demonstration of three dimensional imaging of blood vessel using a no moving parts electronic lens-based optical confocal microscope** [6510-18]
N. A. Riza, M. Sheikh, Photonic Information Processing Systems Lab. (USA); G. Webb-Wood, P. Kik, The College of Optics and Photonics, Univ. of Central Florida (USA)
- 65100K **Elemental spectrum of a mouse obtained via neutron stimulation** [6510-19]
A. C. Sharma, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA); G. D. Tourassi, Duke Univ. Medical Ctr. (USA); A. J. Kapadia, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA);
A. S. Crowell, M. R. Kiser, A. Hutcheson, Triangle Univs. Nuclear Lab., Duke Univ. (USA); B. P. Harrawood, Duke Univ. Medical Ctr. (USA); C. R. Howell, Triangle Univs. Nuclear Lab., Duke Univ. (USA); C. E. Floyd, Jr., Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA)
- 65100L **Initial experimentation with in-line holography x-ray phase-contrast imaging with an ultrafast laser-based x-ray source** [6510-20]
A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA); R. Kincaid, Syracuse Univ. (USA); M. Servol, J.-C. Kieffer, INRS-EMT, Univ. du Québec (Canada); Y. Nesterets, T. Gureyev, A. Stevenson, S. Wilkins, CSIRO Manufacturing and Materials Technology (Australia); H. Ye, E. Lipson, Syracuse Univ. (USA); R. Toth, INRS-EMT, Univ. du Québec (Canada); A. Pogany, CSIRO Manufacturing and Materials Technology (Australia); I. Coman, Ithaca College (USA)

SESSION 5 DETECTOR TECHNOLOGY

- 65100M **A scanning system for intelligent imaging: I-ImaS** [6510-21]
R. Longo, Univ. of Trieste (Italy); A. Asimidis, Univ. of Ioannina (Greece); D. Cavouras, Technological Education Institution of Athens (Greece); C. Esbrand, Univ. College London (United Kingdom); A. Fant, P. Gasiorek, Rutherford Appleton Lab. (United Kingdom); H. Georgiou, Univ. of Athens (Greece); G. Hall, J. Jones, J. Leaver, Imperial College High Energy Physics Group (United Kingdom); G. Li, Academic Ctr. for Dentistry (Netherlands); J. Griffiths, Univ. College London (United Kingdom); D. Machin, Imperial College High Energy Physics Group (United Kingdom); N. Manthos, Univ. of Ioannina (Greece); M. Metaxas, Univ. College London (United Kingdom); M. Noy, Imperial College High Energy Physics Group (United Kingdom); J. M. Østby, SINTEF ICT (Norway); F. Psomadellis, ANCO S.A. (Greece); T. Rokvic, Univ. of Trieste (Italy); G. Royle, Univ. College London (United Kingdom); H. Schulerud, SINTEF ICT (Norway); R. Speller, Univ. College London (United Kingdom); P. van der Stelt, Academic Ctr. for Dentistry (Netherlands); S. Theodoridis, Univ. of Athens (Greece); F. Triantis, Univ. of Ioannina (Greece); R. Turchetta, Rutherford Appleton Lab. (United Kingdom); C. Venanzi, Univ. of Trieste (United Kingdom) and Univ. College London (United Kingdom)
- 65100N **Photon-counting gamma camera based on columnar CsI(Tl) optically coupled to a back-illuminated CCD** [6510-22]
B. W. Miller, H. B. Barber, H. H. Barrett, L. Chen, College of Optical Sciences, Univ. of Arizona (USA); S. J. Taylor, Lockheed Martin Space Systems (USA)
- 65100O **A wafer scale active pixel CMOS image sensor for generic x-ray radiology** [6510-23]
D. Scheffer, Cypress Semiconductor Belgium (Belgium)

- 65100P **Quantitative exploration of performance enhancements offered by active matrix x-ray imagers fabricated on plastic substrates** [6510-24]
L. E. Antonuk, Y. Wang, M. Behravan, Y. El-Mohri, Q. Zhao, H. Du, University of Michigan (USA); A. Badano, FDA (USA)
- 65100Q **Dark current and DQE improvements of mercuric iodide medical imagers** [6510-25]
G. Zentai, L. Partain, R. Pavlyuchkova, Ginzton Technology Ctr. of Varian Medical Systems (USA)

SESSION 6 INNOVATIVE IMAGING II

- 65100R **A sub-matrix method for extracting x-ray coherent scattering form factors from image plate data** [6510-26]
B. W. King, Carleton Univ. (Canada); P. C. Johns, Carleton Univ. (Canada) and Univ. of Ottawa (Canada)
- 65100S **Prism-array lenses for energy filtering in medical x-ray imaging** [6510-27]
E. Fredenberg, B. Cederström, Royal Institute of Technology (Sweden); C. Ribbing, Uppsala Univ. (Sweden); M. Danielsson, Royal Institute of Technology (Sweden)
- 65100T **Phase contrast mammography with synchrotron radiation: physical aspects of the clinical trial** [6510-28]
R. Longo, Univ. of Trieste (Italy) and INFN (Italy); A. Abrami, Sincrotrone Trieste (Italy); F. Arfelli, Univ. of Trieste (Italy) and INFN (Italy); P. Bregant, Univ. of Trieste Hospital (Italy); V. Chenda, Sincrotrone Trieste (Italy); M. A. Cova, Univ. of Trieste (Italy) and Cattinara Hospital (Italy); D. Dreossi, Sincrotrone Trieste (Italy); F. de Guarrini, Trieste Hospital (Italy); R. H. Menk, E. Quai, Sincrotrone Trieste (Italy); E. Quaia, Univ. of Trieste (Italy) and Cattinara Hospital (Italy); T. Rokvic, Univ. of Trieste (Italy), INFN (Italy), and Univ. Belgrade (Serbia); M. Tonutti, Univ. of Trieste (Italy) and Cattinara Hospital (Italy); G. Tromba, Sincrotrone Trieste (Italy); F. Zanconati, Univ. of Trieste (Italy) and Hospital of Trieste (Italy); E. Castelli, Univ. of Trieste (Italy) and INFN (Italy)
- 65100U **Dual-energy contrast enhanced digital breast tomosynthesis: concept, method, and evaluation on phantoms** [6510-29]
S. Puong, Univ. Paris XI (France) and GE Healthcare (France); F. Patoureaux, R. Iordache, GE Healthcare (France); X. Bouchevreau, Altran (France); S. Muller, GE Healthcare (France)
- 65100V **A prototype instrument for adaptive SPECT imaging** [6510-30]
M. Freed, NIBIB/CDRH Lab. for the Assessment of Medical Imaging Systems/FDA (USA); M. A. Kupinski, L. R. Furenlid, H. H. Barrett, College of Optical Sciences, Univ. of Arizona (USA)
- 65100W **Multiplexing radiography based on carbon nanotube field emission x-ray technology** [6510-31]
J. Zhang, G. Yang, Y. Lee, S. Chang, J. P. Lu, O. Zhou, Univ. of North Carolina, Chapel Hill (USA)

SESSION 7 SYSTEM MODELING

- 65100X **Scattered radiation in flat-detector based cone-beam CT: propagation of signal, contrast, and noise into reconstructed volumes** [6510-32]
J. Wiegert, S. Hohmann, M. Bertram, Philips Research Labs. (Germany)
- 65100Y **Validation of simulated point response of columnar phosphor screens** [6510-33]
A. Badano, I. S. Kyprianou, K. H. Tang, A. Saha, CDRH/FDA (USA)
- 65100Z **Monte Carlo package for simulating radiographic images of realistic anthropomorphic phantoms described by triangle meshes** [6510-34]
A. Badal, Food and Drug Administration (USA) and Univ. Politècnica de Catalunya (Spain); I. Kyprianou, A. Badano, Food and Drug Administration (USA); J. Sempau, Univ. Politècnica de Catalunya (Spain); K. J. Myers, Food and Drug Administration (USA)
- 651011 **Noise transfer analysis of base material decomposition methods** [6510-36]
B. J. Heismann, Siemens Medical Solutions (Germany) and Friedrich-Alexander Univ. Erlangen-Nuremberg (Germany)

SESSION 8 CARDIAC IMAGING

- 651012 **Motion compensated reconstructions of calcified coronary plaques in cardiac CT** [6510-37]
M. King, X. Pan, M. Giger, K. Suzuki, The Univ. of Chicago (USA)
- 651013 **Proposed diagnostic reference levels for 3 common cardiac interventional procedures in Ireland** [6510-38]
C. D'Heft, A. M. McGee, L. A. Rainford, Univ. College Dublin (Ireland); S. L. Mc Fadden, C. M. Hughes, R. J. Winder, Univ. of Ulster at Jordanstown (United Kingdom); P. C. Brennan, Univ. College Dublin (Ireland)
- 651014 **ECG-gated HYPR reconstruction for undersampled CT myocardial perfusion imaging** [6510-39]
M. A. Speidel, M. S. Van Lysel, S. B. Reeder, M. Supanich, B. E. Nett, J. Zambelli, S. M. Chang, Univ. of Wisconsin, Madison (USA); J. Hsieh, GE Healthcare (USA) and Univ. of Wisconsin, Madison (USA); G.-H. Chen, C. A. Mistretta, Univ. of Wisconsin, Madison (USA)
- 651015 **Cardiac C-arm CT: 4D non-model based heart motion estimation and its application** [6510-40]
M. Prümmer, FA Univ. Erlangen-Nuremberg (Germany); R. Fahrig, Stanford Univ. (USA); L. Wigström, Stanford Univ. (USA) and Linköping Univ. (Sweden); J. Boese, G. Lauritsch, Siemens AG, Medical Solutions (Germany); N. Strobel, Siemens AG Medical Solutions, Stanford Univ. (USA); J. Hornegger, FA Univ. Erlangen-Nürnberg (Germany)
- 651016 **Image-domain motion compensated time resolved 4D cardiac CT** [6510-41]
K. Taguchi, Johns Hopkins Univ. School of Medicine (USA); Z. Sun, Johns Hopkins Univ. School of Medicine (USA) and Johns Hopkins Univ. (USA); W. P. Segars, Duke Univ. (USA); E. K. Fishman, Johns Hopkins Univ. School of Medicine (USA); B. M. W. Tsui, Johns Hopkins Univ. School of Medicine (USA) and Johns Hopkins Univ. (USA)

SESSION 9 X-RAY IMAGING

- 651017 **Configuration of AEC kVp dependence for digital radiography systems** [6510-42]
W. Huang, R. Van Metter, C.-Y. J. Yang, J. Yorkston, Eastman Kodak Co. (USA)
- 651018 **The x-ray light valve: a low-cost, digital radiographic imaging system-spatial resolution** [6510-43]
R. D. MacDougall, I. Koprinarov, C. A. Webster, J. A. Rowlands, Sunnybrook Health Sciences Ctr., Univ. of Toronto (Canada)
- 651019 **Development of a portable instrument for automated measurements of the detective quantum efficiency of x-ray detectors** [6510-44]
I. A. Cunningham, S. Lazarev, M. Sattarivand, N. D. Jankovic, Robarts Research Institute (Canada)
- 65101A **Multimode C-arm fluoroscopy, tomosynthesis, and cone-beam CT for image-guided interventions: from proof of principle to patient protocols** [6510-45]
J. H. Siewerdsen, Princess Margaret Hospital (Canada) and Univ. of Toronto (Canada); M. J. Daly, G. Bachar, Princess Margaret Hospital (Canada); D. J. Moseley, Princess Margaret Hospital (Canada) and Univ. of Toronto (Canada); G. Bootsma, Univ. of Toronto (Canada); K. K. Brock, Univ. of Toronto (Canada) and Princess Margaret Hospital (Canada); S. Ansell, G. A. Wilson, Princess Margaret Hospital (Canada); S. Chhabra, Univ. of Toronto (Canada); D. A. Jaffray, Princess Margaret Hospital (Canada) and Univ. of Toronto (Canada); J. C. Irish, Princess Margaret Hospital (Canada)
- 65101B **Optimization of a CR system comprising line-scanning and needle image plate technology with respect to examinations of extremities** [6510-46]
C. Herrmann, J. Frankenberger, G. Reiser, Agfa-Gevaert HealthCare AG (Germany); J. Lamotte, Agfa-Gevaert N.V. (Belgium)
- 65101C **Progress in electron-multiplying CCD (EMCCD) based high-resolution high-sensitivity x-ray detector for fluoroscopy and radiography** [6510-47]
A. T. Kuhls, G. Yadava, V. Patel, D. R. Bednarek, S. Rudin, Univ. at Buffalo (USA)

SESSION 10 BREAST IMAGING

- 65101D **A contrast-detail comparison of computed mammatomography and digital mammography** [6510-48]
R. L. McKinley, M. P. Tornai, C. E. Floyd, E. Samei, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)
- 65101F **Evaluation of lesion distortion at various CT system filters in the development of a hybrid system for dedicated mammatomography** [6510-50]
P. Madhav, D. J. Crotty, R. L. McKinley, M. P. Tornai, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)
- 65101G **Performance characterization of a volumetric breast ultrasound scanner** [6510-51]
T. R. Nelson, J. Nebeker, S. Denton, L. I. Cervino, D. H. Pretorius, Univ. of California, San Diego (USA); J. M. Boone, Univ. of California, Davis (USA)

- 65101H **Investigating novel patient bed designs for use in a hybrid dual modality dedicated 3D breast imaging system** [6510-52]
D. J. Crotty, P. Madhav, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA); R. L. McKinley, Duke Univ. Medical Ctr. (USA); M. P. Tornai, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)

SESSION 11 TOMOSYNTHESIS

- 65101I **Methodology of NEQ (f) analysis for optimization and comparison of digital breast tomosynthesis acquisition techniques and reconstruction algorithms** [6510-53]
Y. Chen, J. Y. Lo, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA); N. T. Ranger, Duke Univ. Medical Ctr. (USA); E. Samei, J. T. Dobbins III, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA)
- 65101J **Improved in-plane visibility of tumors using breast tomosynthesis** [6510-54]
M. Ruschin, P. Timberg, T. Svahn, I. Andersson, B. Hemdal, S. Mattsson, Lund Univ., Malmö Univ. Hospital (Sweden); M. Båth, Sahlgrenska Univ. Hospital (Sweden); A. Tingberg, Lund Univ., Malmö Univ. Hospital (Sweden)
- 65101K **A mathematical model approach toward combining information from multiple image projections of the same patient** [6510-55]
A. S. Chawla, E. Samei, Duke Univ. (USA); C. Abbey, Univ. of California, Davis (USA)
- 65101L **Effect of acquisition parameters on image quality in digital tomosynthesis** [6510-56]
T. Deller, K. N. Jabri, J. M. Sabol, X. Ni, G. Avinash, R. Saunders, R. Uppaluri, GE Healthcare Technologies (USA)
- 65101M **Optimization of detector operation and imaging geometry for breast tomosynthesis** [6510-57]
W. Zhao, B. Zhao, P. R. Fisher, State Univ. of New York at Stony Brook (USA); P. Warmoes, Anrad Corp. (Canada); T. Mertelmeier, J. Orman, Siemens AG (Germany)
- 65101N **Circular tomosynthesis implemented with a clinical interventional flat-panel based C-arm: initial performance study** [6510-58]
B. E. Nett, J. Zambelli, Univ. of Wisconsin-Madison (USA); C. Riddell, GE Healthcare (France); B. Belanger, GE Healthcare (USA); G.-H. Chen, Univ. of Wisconsin-Madison (USA)

SESSION 12 CT SYSTEMS

- 65101O **Perfusion analysis using a wide coverage flat-panel volume CT: feasibility study** [6510-59]
M. Grasruck, Siemens Medical Solutions (Germany); R. Gupta, B. Reichardt, Massachusetts General Hospital (USA); E. Klotz, B. Schmidt, T. Flohr, Siemens Medical Solutions (Germany)
- 65101P **Evaluation of the spatial resolution of a dedicated breast CT system using computer simulation** [6510-60]
K. Yang, Univ. of California, Davis Medical Ctr. (USA) and Univ. of California, Davis (USA); A. L. C. Kwan, Univ. of California, Davis Medical Ctr. (USA) and Memorial Sloan-Kettering Cancer Ctr. (USA); J. M. Boone, Univ. of California, Davis Medical Ctr. (USA) and Univ. of California, Davis (USA)

- 65101Q **Novel C-arm based cone-beam CT using a source trajectory of two concentric arcs** [6510-61]
J. Zambelli, B. E. Nett, S. Leng, Univ. of Wisconsin-Madison (USA); C. Riddell, GE Healthcare (France); B. Belanger, GE Healthcare (USA); G.-H. Chen, Univ. of Wisconsin-Madison (USA)
- 65101R **Microcomputed tomography with a photon-counting x-ray detector** [6510-62]
E. C. Frey, K. Taguchi, Johns Hopkins Univ. (USA); M. Kapusta, Gamma Medica-Ideas (USA); J. Xu, Johns Hopkins Univ. (USA); T. Orskaug, I. Ninive, D. Wagenaar, B. Patt, Gamma Medica-Ideas (USA); B. M. W. Tsui, Johns Hopkins Univ. (USA)
- 65101S **Evaluation of noise power spectra of CT images** [6510-63]
K. G. Metheany, Univ. of California, Davis (USA) and Univ. of California, Davis Medical Ctr. (USA); A. L. C. Kwan, Univ. of California, Davis Medical Ctr. (USA) and Memorial Sloan-Kettering Cancer Ctr. (USA); J. M. Boone, Univ. of California, Davis Medical Ctr. (USA) and Univ. of California, Davis

SESSION 13 SIGNAL CORRECTIONS

- 65101T **Evaluation of scatter effects on image quality for breast tomosynthesis** [6510-64]
G. Wu, Sunnybrook Health Sciences Ctr. (Canada) and Univ. of Toronto (Canada); J. G. Mainprize, Univ. of Toronto (Canada); J. M. Boone, Univ. of California, Davis Medical Ctr. (USA); M. J. Yaffe, Sunnybrook Health Sciences Ctr. (Canada) and Univ. of Toronto (Canada)
- 65101U **Improved scatter correction for x-ray conebeam CT using primary modulation** [6510-65]
L. Zhu, Stanford Univ. (USA); J. StarLack, Varian Medical Systems (USA); N. R. Bennett, T. Li, L. Xing, R. Fahrig, Stanford Univ. (USA)
- 65101V **Evaluation of scatter mitigation strategies for x-ray cone-beam CT: impact of scatter subtraction and anti-scatter grids on contrast-to-noise ratio** [6510-66]
D. Lazos, G. Lasio, J. Evans, J. F. Williamson, Virginia Commonwealth Univ. (USA)

Part Two

- 65101W **Motion artifact reduction in fan-beam and cone-beam computed tomography via the fan-beam data consistency condition (FDCC)** [6510-67]
S. Leng, B. Nett, M. Speidel, G.-H. Chen, Univ. of Wisconsin, Madison (USA)
- 65101X **Resolution and noise trade-off analysis for volumetric CT** [6510-68]
B. Li, General Electric Healthcare Technologies (USA); S. Nandyala, Rochester Institute of Technology (USA); G. Avinash, J. Hsieh, General Electric Healthcare Technologies (USA)
- 65101Y **Sinogram restoration of dual focal spot CT data** [6510-69]
P. Forthmann, T. Köhler, Philips Research Europe, Hamburg (Germany); P. Begemann, Univ. Medical Ctr. Hamburg-Eppendorf (Germany); M. Defrise, Vrije Univ. Brussel (Belgium)

SESSION 14 CONE BEAM RECONSTRUCTION

- 65101Z **A Poisson likelihood iterative reconstruction algorithm for material decomposition in CT** [6510-70]
J. Xu, E. C. Frey, K. Taguchi, B. M. W. Tsui, Johns Hopkins Univ. (USA)
- 651020 **Limited view angle tomographic image reconstruction via total variation minimization** [6510-71]
J. Velikina, S. Leng, G.-H. Chen, Univ. of Wisconsin, Madison (USA)
- 651021 **Analytical cone-beam reconstruction using a multi-source inverse geometry CT system** [6510-72]
Z. Yin, B. De Man, J. Pack, GE Global Research (USA)
- 651022 **Gated cone-beam CT imaging of the thorax: a reconstruction study** [6510-73]
S. Rit, LIRIS, Univ. Lumière Lyon 2 (France); D. Sarrut, CREATIS, INSA Lyon (France) and Ctr. Léon Bérard (France); S. Miguët, LIRIS, Univ. Lumière Lyon 2 (France)
- 651023 **A practical reconstruction algorithm for CT noise variance maps using FBP reconstruction** [6510-74]
L. Zhu, Stanford Univ. (USA); J. StarLack, Varian Medical Systems (USA)

SESSION 15 ADVANCED RECONSTRUCTION

- 651024 **A method for atlas-based volumetric registration with surface constraints for optical bioluminescence tomography in small animal imaging** [6510-75]
A. J. Chaudhari, A. A. Joshi, F. Darvas, R. M. Leahy, Univ. of Southern California (USA)
- 651025 **3D bioluminescent source localization of different depths with spectrum information and adaptive finite element analysis** [6510-76]
Y. Lv, J. Tian, Institute of Automation (China); W. Cong, G. Wang, Virginia Polytechnic Institute and State Univ. (USA); W. Yang, M. Xu, Institute of Automation (China)
- 651026 **An iterative method for the reconstruction of the coronary arteries from rotational x-ray angiography** [6510-77]
E. Hansis, Philips Research Europe (Germany) and Univ. of Karlsruhe (Germany); D. Schäfer, M. Grass, Philips Research Europe (Germany); O. Dössel, Univ. of Karlsruhe (Germany)
- 651027 **Image reconstruction in digital breast tomosynthesis by total variation minimization** [6510-78]
E. Y. Sidky, I. S. Reiser, R. Nishikawa, X. Pan, The Univ. of Chicago (USA)
- 651028 **Planar tomosynthesis reconstruction in a parallel-beam framework via virtual object reconstruction** [6510-79]
B. E. Nett, S. Leng, G.-H. Chen, Univ. of Wisconsin-Madison (USA)
- 651029 **Sub-pixel compounding from elasticity imaging data** [6510-80]
Z. Yang, S. Sinha, R. C. Booi, M. A. Roubidoux, B. Ma, J. B. Fowlkes, G. L. LeCarpentier, P. L. Carson, Univ. of Michigan (USA)

POSTER SESSION

Radiography/Computed Tomography

- 65102A **Experimental benchmarking of a Monte Carlo dose simulation code for pediatric CT (Honorable Mention Poster Award)** [6510-81]
X. Li, E. Samei, T. Yoshizumi, Duke Univ. (USA); J. G. Colsher, GE Healthcare Technologies (USA); R. P. Jones, Duke Univ. School of Medicine (USA); D. P. Frush, Duke Univ. (USA)
- 65102B **Low dose applications of lightspeed VCT in cardiac imaging** [6510-82]
J. Li, GE Healthcare China (China); J. Hsieh, R. Lundgren, GE Healthcare Technologies (USA); Y. Shen, GE Healthcare China (China)
- 65102C **Radiation dose from MDCT using Monte Carlo simulations: estimating fetal dose due to pulmonary embolism scans accounting for overscan** [6510-83]
E. Angel, David Geffen School of Medicine at UCLA (USA); C. Wellnitz, Mayo Clinic (USA); M. Goodsitt, Univ. of Michigan (USA); J. DeMarco, C. Cagnon, M. Ghatali, David Geffen School of Medicine at UCLA (USA); D. Cody, D. Stevens, U.T.M.D. Anderson Cancer Ctr. (USA); C. McCollough, A. Primak, Mayo Clinic (USA); M. McNitt-Gray, David Geffen School of Medicine at UCLA (USA)
- 65102D **Methodology for determining dose reduction for chest tomosynthesis** [6510-84]
C. M. Li, J. T. Dobbins III, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA)
- 65102E **Coupling the use of anti-scatter grid with analytical scatter estimation in cone beam CT** [6510-85]
J. Rinkel, L. Gerfault, CEA-LETI MINATEC (France); F. Estève, INSERM (France); J. Dinten, CEA-LETI MINATEC (France)
- 65102F **Initial application of digital tomosynthesis to improve brachytherapy treatment planning** [6510-86]
A. H. Baydush, M. Mirzaei McKee, Wake Forest Univ. School of Medicine (USA); J. King, North Carolina Baptist Hospital (USA); D. J. Godfrey, Wake Forest Univ. School of Medicine (USA)
- 65102G **CatSim: a new computer assisted tomography simulation environment** [6510-87]
B. De Man, S. Basu, GE Global Research (USA); N. Chandra, B. Dunham, GE Healthcare (USA); P. Edic, M. Iatrou, GE Global Research (USA); S. McOlash, P. Sainath, C. Shaughnessy, GE Healthcare (USA); B. Tower, GE Global Research (USA); E. Williams, GE Healthcare (USA)
- 65102H **Dual-energy contrast enhanced digital mammography using a new approach for breast tissue canceling** [6510-88]
S. Puong, Univ. Paris XI (France) and GE Healthcare (France); X. Bouchevreau, Altran (France); F. Patoureaux, R. Iordache, S. Muller, GE Healthcare (France)
- 65102I **Dedicated dental volumetric and total body multislice computed tomography: a comparison of image quality and radiation dose** [6510-89]
S. Strocchi, V. Colli, Univ. Hospital of Insubria (Italy); R. Novario, G. Carrafiello, Univ. of Insubria (Italy); A. Giorgianni, Univ. Hospital of Insubria (Italy); A. Macchi, C. Fugazzola, L. Conte, Univ. of Insubria (Italy)

- 65102J **Semi-empirical scattering correction model for MSCT** [6510-90]
O. Amir, I. Sabo-Napadensky, Philips Medical Systems (Israel)
- 65102K **Scattering phenomena in MSCT: measurements and analysis** [6510-91]
I. Sabo-Napadensky, O. Amir, Philips Medical Systems (Israel)
- 65102L **Optimized anti-scatter grids for flat panel detectors** [6510-92]
M. Lendl, Siemens AG, Medical Solutions (Germany)
- 65102M **On the development of a Gaussian noise model for scatter compensation** [6510-93]
J. Q. Xia, Duke Univ. (USA); G. D. Tourassi, Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA); J. Y. Lo, C. E. Floyd, Jr., Duke Univ. (USA) and Duke Univ. Medical Ctr. (USA)
- 65102N **Clinical usefulness of automatic phase selection in coronary CT angiography (CTA)** [6510-94]
T. Ota, Toshiba Information Systems (Japan) Corp. (Japan); I. Hein, Toshiba Medical Research Institute USA, Inc. (USA); M. Okumura, Toshiba Medical Systems Corp. (Japan); H. Anno, K. Katada, Fujita Health Univ. School of Medicine (Japan)
- 65102O **Enhancement of edge response in same matrix size of x-ray CT image without special image processing** [6510-95]
N. Yasuda, Y. Ishikawa, Y. Koderu, Nagoya Univ. (Japan)
- 65102P **Application of time sampling in brain CT perfusion imaging for dose reduction** [6510-96]
S. H. Lee, J. H. Kim, K. G. Kim, S. J. Park, J. G. Im, Seoul National Univ. College of Medicine (South Korea)
- 65102Q **Robust temporal resolution of MSCT cardiac scan by rotation-time update scheme based on analysis of patient ECG database** [6510-97]
S. Glasberg, Philips Medical Systems Technologies, Ltd. (Israel); D. Farjon, M. Ankry, Jerusalem College of Technology (Israel); S. Eisenbach, Philips Medical Systems Technologies, Ltd. (Israel); M. Shnapp, Philips Medical Systems Technologies, Ltd. (Israel) and Carmel Medical Ctr. (Israel); A. Altman, Philips Medical Systems Technologies, Ltd. (Israel)
- 65102R **Development of the translating and rotating volume computed tomography (TRVCT)** [6510-98]
S.-W. Park, Y. Yi, Korea Univ. (South Korea); J. B. Park, DRGEM Co. (South Korea)
- 65102S **Dose reduction of up to 89% while maintaining image quality in cardiovascular CT achieved with prospective ECG gating** [6510-99]
J. H. Londt, U. Shreter, M. Vass, J. Hsieh, Z. Ge, GE Healthcare (USA); O. Adda, GE Healthcare (France); D. A. Dowe, Atlantic Medical Imaging (USA); J.-L. Sablayrolles, Ctr. Cardiologique du Nord (France)
- Breast Imaging*
- 65102T **Characterization of a prototype tabletop x-ray CT breast imaging system** [6510-100]
J. M. O'Connor, Univ. of Massachusetts, Lowell (USA) and Univ. of Massachusetts Medical School (USA); S. J. Glick, Univ. of Massachusetts Medical School (USA); X. Gong, Rush Univ. Medical Ctr. (USA); C. Didier, Univ. of Massachusetts, Lowell (USA) and Univ. of Massachusetts Medical School (USA); M. Mah'd, Univ. of Massachusetts, Lowell (USA)

- 65102U **Iodine contrast cone-beam CT imaging of breast cancer** [6510-101]
L. Partain, S. Prionas, E. Seppi, G. Virshup, G. Roos, R. Sutherland, Varian Medical Systems (USA); J. Boone, UC Davis Medical Ctr. (USA)
- 65102V **A computer simulation for evaluating dual-energy contrast-enhanced breast tomosynthesis** [6510-102]
S. J. Glick, Univ. of Massachusetts Medical School (USA); C. Didier, Univ. of Massachusetts at Lowell (USA)
- 65102W **Quantitative flow phantom for contrast-enhanced breast tomosynthesis** [6510-103]
M. L. Nock, Sunnybrook Health Sciences Ctr. (Canada) and Univ. of Toronto (Canada); M. P. Kempston, J. G. Mainprize, Sunnybrook Health Sciences Ctr. (Canada); M. J. Yaffe, Sunnybrook Health Sciences Ctr. (Canada) and Univ. of Toronto (Canada)
- 65102Y **Dual energy contrast enhanced breast imaging optimization using contrast to noise ratio** [6510-105]
C. D. Arvanitis, G. Royle, R. Speller, Univ. College London (United Kingdom)
- 65102Z **Breast density mapping based upon system calibration, x-ray techniques, and FFDM images** [6510-106]
B. Chen, A. P. Smith, Z. Jing, T. Wu, Hologic, Inc. (USA)
- 651030 **A novel cone beam breast CT scanner: system evaluation** [6510-108]
R. Ning, D. Conover, Y. Yu, Y. Zhang, W. Cai, R. Betancourt-Benitez, X. Lu, Univ. of Rochester (USA)
- 651032 **Optimization of image quality in breast tomosynthesis using lumpectomy and mastectomy specimens** [6510-110]
P. Timberg, M. Ruschin, Lund Univ., Malmö Univ. Hospital (Sweden); M. Båth, Sahlgrenska Univ. Hospital (Sweden); B. Hemdal, I. Andersson, T. Svahn, S. Mattsson, A. Tingberg, Lund Univ., Malmö Univ. Hospital (Sweden)
- 651033 **Segmentation-free estimation of volume changes in 3D ultrasound of breast lesion phantoms** [6510-111]
G. Narayanasamy, R. Narayanan, J. B. Fowlkes, M. Roubidoux, P. L. Carson, Univ. of Michigan (USA)
- 651034 **Investigation of the use of iodinated contrast agent in a proposed flat-panel CT mammography system** [6510-112]
C. Didier, Univ. of Massachusetts, Lowell (USA) and Univ. of Massachusetts Medical School (USA); S. Glick, Univ. of Massachusetts Medical School (USA); X. Gong, Rush Univ. Medical School (USA); Y. Chen, Univ. of Massachusetts Medical School (USA); M. Mahd, Univ. of Massachusetts, Lowell (USA)
- 651035 **Novel single x-ray absorptiometry method to solve for volumetric breast density in mammograms with paddle tilt** [6510-113]
S. Malkov, J. Wang, J. Shepherd, Univ. of California at San Francisco (USA)
- 651036 **Breast positioning system for full field digital mammography and digital breast tomosynthesis system** [6510-114]
M. Varjonen, Planmed Oy (Finland); M. Pamilo, P. Hokka, Health Services Research, Ltd. (Finland); R. Hokkanen, P. Strömmer, Planmed Oy (Finland)

- 651037 **Analysis of patient bed positioning in SPECT-CT imaging for dedicated mammotomography** [6510-115]
K. L. Perez, Duke Univ. Medical Ctr. (USA); P. Madhav, D. J. Crotty, M. P. Tornai, Duke Univ. Medical Ctr. (USA) and Duke Univ. (USA)
- 651038 **Glandular segmentation of cone beam breast CT volume images** [6510-116]
N. Packard, J. M. Boone, U.C. Davis (USA)
- 651039 **Evaluation of a new breast-shaped compensation filter for a newly built breast imaging system** [6510-117]
W. Cai, R. Ning, Y. Zhang, D. Conover, Univ. of Rochester (USA)
- 65103A **Evaluation of physical image characteristics of phase contrast mammography** [6510-118]
A. Yamazaki, Nagoya Univ. (Japan); K. Ichikawa, Kanazawa Univ. (Japan); Y. Kodera, Nagoya Univ. (Japan)
- 65103B **Digital breast tomosynthesis geometry calibration (Honorable Mention Poster Award)** [6510-119]
X. Wang, J. G. Mainprize, M. P. Kempston, G. E. Mawdsley, Sunnybrook Health Sciences Ctr. (Canada); M. J. Yaffe, Sunnybrook Health Sciences Ctr. (Canada) and Univ. of Toronto (Canada)
- 65103C **A new approach to digital breast tomosynthesis for breast cancer screening** [6510-120]
R. M. Nishikawa, I. Reiser, P. Seifi, C. J. Vyborny, The Univ. of Chicago (USA)
- 65103D **Development of a model for breast tomosynthesis image acquisition** [6510-121]
I. Reiser, R. M. Nishikawa, E. Y. Sidky, M. R. Chinander, P. Seifi, The Univ. of Chicago (USA)
- Innovative Imaging*
- 65103F **Super-resolution ultrasound tomography: a preliminary study with a ring array (Honorable Mention Poster Award)** [6510-124]
F. Simonetti, Imperial College London (United Kingdom) and Los Alamos National Lab. (USA);
L. Huang, Los Alamos National Lab. (USA); N. Duric, O. Rama, Wayne State Univ. (USA)
- 65103G **Development of qualitative near infrared vascular imaging system with tuned aperture computed tomography** [6510-126]
T. Matsushita, Juntendo Univ. (Japan) and Kanazawa Univ. (Japan); T. Miyati, K. Nakayama, T. Hamaguti, Kanazawa Univ. (Japan); Y. Hayakawa, Tokyo Dental College (Japan); A. G. Farman, Louisville Univ. (USA); Y. Kikuchi, Kanazawa Univ. (Japan)
- 65103J **Adaptive MOEMS mirrors for medical imaging** [6510-129]
R. Fayek, H. Ibrahim, Univ. of Waterloo (Canada)
- 65103K **Energy and dose considerations for diffraction enhanced CT in small animal studies** [6510-130]
D. Connor, F. A. Dilmanian, Brookhaven National Lab. (USA); C. Parham, Univ. of North Carolina at Chapel Hill (USA); T. Kao, Z. Zhong, Brookhaven National Lab. (USA)

- 65103L **Characterization of a novel microCT detector for small animal computed tomography (CT)** [6510-131]
S. C. Thacker, V. V. Nagarkar, Radiation Monitoring Devices (USA); H. J. Liang, Univ. of California, Davis (USA); V. Gaysinskiy, S. Miller, Radiation Monitoring Devices (USA); S. R. Cherry, Univ. of California, Davis (USA)
- 65103M **Dual-energy cone-beam micro-CT for animal imaging: preliminary study** [6510-132]
S. Cho, E. Sidky, J. Bian, X. Pan, Univ. of Chicago (USA)
- 65103N **A system model for pinhole SPECT simulating edge penetration, detector, and pinhole response and non-uniform attenuation** [6510-133]
C. Wietholt, National Health Research Institute (Taiwan) and Chang Gung Memorial Hospital (Taiwan); I.-T. Hsiao, Chang Gung Univ. (Taiwan); C.-T. Chen, National Health Research Institute (Taiwan) and Univ. of Chicago (USA)
- 65103O **Analytical deconvolution for improvement in spatial resolution of the In-111 coincidence camera (Honorable Mention Poster Award)** [6510-134]
Z. Cao, Medical College of Georgia (USA)
- 65103P **Mean absorbed dose to mouse in micro-CT imaging with an ultrafast laser-based x-ray source** [6510-135]
A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA); H. Ye, R. Kincaid, Syracuse Univ. (USA); J. Boone, Univ. of California Davis Medical Ctr. (USA); M. Servol, J.-C. Kieffer, INRS-EMT, Univ. du Québec (Canada); Y. Nesterets, T. Gureyev, A. Stevenson, S. Wilkins, CSIRO Manufacturing and Infrastructure Technology (Australia); E. Lipson, Syracuse Univ. (USA); R. Toth, INRS-EMT, Univ. du Québec (Canada); A. Pogany, CSIRO Manufacturing and Infrastructure Technology (Australia); I. Coman, Ithaca College (USA)
- 65103Q **Evaluation of frequency multiplexing radiography based on multi-pixel x-ray technology** [6510-136]
J. Zhang, G. Yang, Y. Lee, S. Chang, J. P. Lu, O. Zhou, Univ. of North Carolina, Chapel Hill (USA)
- 65103R **Modeling and testing of a non-standard scanning device with dose reduction potential (Honorable Mention Poster Award)** [6510-137]
H. de las Heras, O. Tischenko, W. Panzer, GSF National Research Ctr. for Environment and Health (Germany); Y. Xu, Univ. of Oregon (USA); C. Hoeschen, GSF National Research Ctr. for Environment and Health (Germany)
- 65103S **Imaging with Iridium photons: an application in brachytherapy** [6510-138]
F. Verhaegen, S. Palefsky, D. Rempel, E. Poon, McGill Univ. (Canada)
- Detectors*
- 65103V **Photon counting pixel architecture for x-ray and gamma-ray imaging applications** [6510-141]
A. H. Goldan, L. Ng, Simon Fraser Univ. (Canada); J. A. Rowlands, Sunnybrook and Women's College Health Sciences Ctr. (Canada); K. S. Karim, Simon Fraser Univ. (Canada)
- 65103W **Amplified pixel sensor architectures for low dose computed tomography using silicon thin film technology (Honorable Mention Poster Award)** [6510-142]
F. Taghibakhsh, K. S. Karim, Simon Fraser Univ. (Canada)

- 65103X **Multidetector-row CT with a 64-row amorphous silicon flat panel** [6510-143]
E. G. Shapiro, R. E. Colbeth, E. T. Daley, I. D. Job, I. P. Mollov, T. I. Mollov, J. M. Pavkovich,
P. G. Roos, J. M. Star-Lack, C. A. Tognina, Varian Medical Systems (USA)
- 65103Y **Comparison of multi-arm VRX CT scanners through computer models** [6510-144]
D. A. Rendon, F. A. DiBianca, G. S. Keyes, Univ. of Tennessee Health Science Ctr. (USA)
- 65103Z **Effect of multiple dopants on the quantum efficiency of LiF thermoluminescent dosimeters (TLD) and BaFX (X = Br,Cl,I) storage phosphors** [6510-145]
V. Weir, J. Zhang, E. R. Ritenour, Univ. of Minnesota (USA)

Part Three

- 651040 **Evaluation of Moire artifacts with stationary anti-scatter grids in amorphous selenium-based flat panel x-ray detector system** [6510-146]
K. Oda, Anjo Kosei Hospital (Japan); M. Tsuzaka, Nagoya Univ. School of Health Science (Japan)
- 651041 **A simple all-digital PET system** [6510-147]
Q. Xie, The Univ. of Chicago (USA) and Huazhong Univ. of Science and Technology (China); C.-M. Kao, R. Xia, X. Wang, N. Li, X. Jiang, L. Zhi, Z. Zhang, Z. Deng, Huazhong Univ. of Science and Technology (China); C.-T. Chen, The Univ. of Chicago (USA)
- 651042 **Comparison of compound semiconductor radiation films deposited by screen printing method** [6510-148]
C. Choi, C. Kyun, S. Kang, S. Nam, Inje Univ. (South Korea)
- 651044 **Comparison in image quality and noise component of columnar phosphor plate and powder phosphor plate** [6510-150]
K. Shimada, H. Yasuda, S. Arakawa, T. Kuwabara, A. Takasu, Y. Iwabuchi, M. Katou, FUJIFILM Corp. (Japan)
- 651045 **Image quality of the front exposure system and the back exposure system in the indirect (x-ray-to-light conversion) digital radiography system** [6510-151]
A. Takasu, Y. Iwabuchi, M. Kato, S. Arakawa, H. Yasuda, K. Shimada, T. Kuwabara, FUJIFILM Corp. (Japan)
- 651046 **Fluorozirconate-based glass-ceramic storage phosphors for digital mammography** [6510-152]
S. Schweizer, Argonne National Lab. (USA) and Univ. of Paderborn (Germany);
A. R. Lubinsky, State Univ. of New York at Stony Brook (USA); J. A. Johnson, Argonne National Lab. (USA)
- 651047 **A new x-ray imaging technique for radiography mode of flat-panel imager** [6510-153]
K. Suzuki, S. Ikeda, K. Ueda, Hitachi Medical Corp. (Japan); R. Baba, Hitachi, Ltd. (Japan)
- Performance Assessment
- 651048 **A new paradigm in portal imaging QA: fast measurements of modulation transfer function (MTF) and detective quantum efficiency (DQE) using line-pair bar patterns** [6510-154]
A. Gopal, S. S. Samant, Univ. of Florida (USA)

- 651049 **Characterization of a CMOS detector for limited-view mammography** [6510-155]
I. A. Elbakri, CancerCare Manitoba (Canada)
- 65104A **Investigation of the Z-axis resolution of breast tomosynthesis mammography systems (Honorable Mention Poster Award)** [6510-156]
Y. Zhang, H.-P. Chan, B. Sahiner, J. Wei, J. Ge, L. M. Hadjiiski, C. Zhou, Univ. of Michigan (USA)
- 65104B **Performance analysis of a CsI-based flat panel detector in a cone beam variable resolution x-ray system** [6510-157]
B. Dahi, G. S. Keyes, D. A. Rendon, F. A. DiBianca, Univ. of Tennessee Health Science Ctr. (USA)
- 65104D **The CT image standardization based on the verified PSF** [6510-159]
S. Wada, M. Ohkubo, M. Kunii, Niigata Univ. (Japan); T. Matsumoto, National Institute of Radiological Sciences (Japan); K. Murao, Fujitsu, Ltd. (Japan); K. Awai, Kumamoto Univ. (Japan); M. Ikeda, Nagoya Univ. (Japan)
- 65104E **Minimum dose calculation for different imaging tasks in digital projection radiography** [6510-160]
F. H. Schöfer, GSF Research Ctr. for Environment and Health (Germany); K. Schneider, Univ. München (Germany); C. Hoeschen, GSF Research Ctr. for Environment and Health (Germany)
- 65104F **Validation of software for QC assessment of MTF and NPS** [6510-161]
W. Peppler, Univ. of Wisconsin-Madison (USA); W. Hong, R. Steinhauser, Gammex, Inc. (USA); B. Whiting, Mallinckrodt Institute of Radiology (USA); E. Samei, Duke Advanced Imaging Lab. (USA); M. Flynn, Henry Ford Health System (USA); S. Don, Mallinckrodt Institute of Radiology (USA); N. Corradini, Univ. of Wisconsin-Madison (USA)
- 65104G **Software tools dedicated for an automatic analysis of the CT scanner quality control images** [6510-162]
T. Torfeh, IRCCyN/IVC, CNRS, Univ. de Nantes (France); S. Beaumont, QualiFormeD SARL (France); J. Guédon, N. Normand, E. Denis, IRCCyN/IVC, CNRS, Univ. de Nantes (France)
- 65104H **Optimization of image quality and average glandular dose in CR mammography** [6510-163]
K. Satoh, T. Kuwabara, H. Yasuda, S. Arakawa, FUJIFILM Corp. (Japan)
- 65104I **Complete MTF evaluation of two cone beam CT systems** [6510-164]
R. Betancourt Benítez, Univ. of Rochester Medical Ctr. (USA) and Univ. of Rochester (USA); R. Ning, D. Conover, Univ. of Rochester Medical Ctr. (USA)
- 65104J **Automatic quality control of digitally reconstructed radiograph computation and comparison with standard methods** [6510-165]
E. Denis, IRCCyN/IVC, CNRS, Univ. de Nantes (France); S. Beaumont, QualiFormeD Sarl (France); J. Guédon, N. Normand, T. Torfeh, IRCCyN/IVC, CNRS, Univ. de Nantes (France)
- 65104K **Physical and psychophysical characterization of a GE senographe DS clinical system** [6510-166]
N. Lanconelli, Univ. of Bologna (Italy); S. Rivetti, P. Golinelli, R. Sansone, Azienda USL di Modena (Italy); M. Bertolini, G. Borasi, Arcispedale Santa Maria Nuova (Italy)

- 65104L **Virtual adaptation of physical phantoms to datasets derived from clinical tomographic examinations** [6510-167]
F. H. Schöfer, GSF Research Ctr. for Environment and Health (Germany); K. Schneider, Univ. München (Germany); C. Hoeschen, GSF Research Ctr. for Environment and Health (Germany)
- 65104M **Performance evaluation of a direct computed radiography system by means of physical characterization and contrast detail analysis** [6510-168]
S. Rivetti, Azienda USL di Modena (Italy); N. Lanconelli, Univ. of Bologna (Italy); M. Bertolini, G. Borasi, Arcispedale Santa Maria Nuova (Italy); D. Acchiappati, A. Burani, Azienda USL di Modena (Italy)
- 65104N **A new method for evaluation of slice sensitivity profiles (SSPz) for spatial variation in 64-channel MSCT** [6510-169]
M. Yamashita, Hokkaido Univ. Hospital (Japan); A. Yamashita, Ohmichi Internal Medicine and Respiratory Clinic (Japan)
- 65104P **How do kV and mAs affect CT lesion detection performance?** [6510-171]
W. Huda, K. M. Ogden, K. Shah, C. Jadoo, E. M. Scalzetti, R. L. Lavallee, M. L. Roskopf, SUNY Upstate Medical Univ. (USA)
- 65104Q **Method for the determination of the modulation transfer function (MTF) in 3D x-ray imaging systems with focus on correction for finite extent of test objects** [6510-172]
D. Schäfer, J. Wiegert, M. Bertram, Philips Research Europe (Germany)
- 65104R **In-plane artifacts in breast tomosynthesis quantified with a novel contrast-detail phantom** [6510-173]
T. Svahn, M. Ruschin, B. Hemdal, Lund Univ., Malmö Univ. Hospital (Sweden); L. Nyhlén, Dalarna Univ. College (Sweden); I. Andersson, P. Timberg, S. Mattsson, A. Tingberg, Lund Univ., Malmö Univ. Hospital (Sweden)
- Signal Analysis*
- 65104S **Sound-speed and attenuation imaging of breast tissue using waveform tomography of transmission ultrasound data** [6510-174]
R. G. Pratt, Queen's Univ. (Canada); L. Huang, Los Alamos National Lab. (USA); N. Duric, P. Littrup, Karmanos Cancer Institute (USA)
- 65104T **Implementation of a fully 3D system model for brain SPECT with fan-beam-collimator OSEM reconstruction with 3D total variation regularization** [6510-175]
H. Ye, Syracuse Univ. (USA); A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA); E. D. Lipson, Syracuse Univ. (USA) and SUNY Upstate Medical Univ. (USA); Y. Lu, Y. Xu, Syracuse Univ. (USA); W. Lee, D. H. Feiglin, SUNY Upstate Medical Univ. (USA)
- 65104U **Hybrid geodesic region-based curve evolutions for image segmentation** [6510-176]
S. Lankton, D. Nain, A. Yezzi, A. Tannenbaum, Georgia Institute of Technology (USA)

- 65104V **Quantitative analysis of 3D stent reconstruction from a limited number of views in cardiac rotational angiography** [6510-177]
B. Perrenot, CREATIS, CNRS, INSERM, INSA Lyon (France) and General Electric Healthcare (France); R. Vaillant, General Electric Healthcare (France); R. Prost, CREATIS, CNRS, INSERM, INSA Lyon (France); G. Finet, Hospices Civils de Lyon (France); P. Douek, CREATIS, CNRS, INSERM, INSA Lyon (France) and Hospices Civils de Lyon (France); F. Peyrin, CREATIS, CNRS, INSERM, INSA Lyon (France)
- 65104W **A wavelet based method for SPECT reconstruction with non-uniform attenuation** [6510-178]
J. Wen, L. Kong, Beijing Institute of Technology (China)
- 65104X **3D view weighted cone-beam backprojection reconstruction for digital tomosynthesis** [6510-179]
B. Li, G. Avinash, General Electric Healthcare (USA); B. Claus, Global Research Ctr., General Electric (USA); S. Metz, General Electric Healthcare (USA)
- 65104Y **Automatic generation of 3D coronary artery centerlines** [6510-180]
U. Jandt, D. Schäfer, Philips Research Europe (Germany); V. Rasche, Univ. of Ulm (Germany); M. Grass, Philips Research Europe (Germany)
- 65104Z **Cone beam CT image quality measurements: PSF de-convolution** [6510-182]
R. Betancourt Benítez, Univ. of Rochester Medical Ctr. (USA) and Univ. of Rochester (USA); R. Ning, D. Conover, Univ. of Rochester Medical Ctr. (USA)
- 651050 **Point spread function based classification of regions for linear digital tomosynthesis** [6510-183]
K. Israni, Univ. of Illinois at Chicago (USA); G. Avinash, B. Li, General Electric Healthcare Technologies (USA)
- 651051 **A practical correction of scatter-related artifacts in SPECT reconstruction** [6510-184]
H. Ye, Syracuse Univ. (USA); A. Krol, SUNY Upstate Medical Univ. (USA) and Syracuse Univ. (USA); E. D. Lipson, Syracuse Univ. (USA) and SUNY Upstate Medical Univ. (USA); V. R. Kunniyur, W. Lee, D. H. Feiglin, SUNY Upstate Medical Univ. (USA)
- 651052 **Statistics of MR signals: revisited** [6510-185]
T. Lei, Univ. of Pennsylvania (USA)
- 651053 **A posteriori respiratory motion compensation for PET imaging** [6510-186]
C. Tauber, Z. Ouksili, IRIT-ENSEEIH (France); J. Nallis, Institut Claudius Regaud (France); H. Batatia, IRIT-ENSEEIH (France); O. Caselles, F. Courbon, Institut Claudius Regaud (France)
- 651054 **Image reconstruction from sparse data samples along spiral trajectories in MRI** [6510-187]
S. J. LaRoque, E. Y. Sidky, X. Pan, The Univ. of Chicago (USA)
- Reconstruction*
- 651055 **Extended volume coverage in helical cone-beam CT by using PI-line-based BPF algorithm** [6510-188]
S. Cho, X. Pan, Univ. of Chicago (USA)

- 651056 **Implementation of a cone-beam backprojection algorithm on the cell broadband engine processor** [6510-189]
O. Bockenbach, Mercury Computer Systems GmbH (Germany); M. Knaup, M. Kachelrieß, Univ. of Erlangen-Nürnberg (Germany)
- 651057 **Image reconstruction from rebinned helical cone-beam projection data** [6510-190]
D. Xia, L. Yu, J. Bian, X. Pan, The Univ. of Chicago (USA)
- 651058 **Implementation of the FDK algorithm for cone-beam CT on the cell broadband engine architecture** [6510-191]
H. Scherl, M. Koerner, H. Hofmann, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany); W. Eckert, M. Kowarschik, Siemens Medical Solutions (Germany); J. Hornegger, Friedrich-Alexander-Univ. Erlangen-Nürnberg (Germany)
- 651059 **Fast arbitrary-slice CT reconstruction with GPUs** [6510-192]
J. Nebeker, T. R. Nelson, U.C. San Diego (USA); J. M. Boone, U.C. Davis (USA)
- 65105A **Hybrid helical image reconstruction in volumetric CT using ray-wise weighted cone beam filtered backprojection algorithm to significantly improve dose efficiency** [6510-193]
X. Tang, J. Hsieh, GE Healthcare Technologies (USA)
- 65105B **Simultaneous reconstruction of activity and attenuation in PET: crosstalk measurements** [6510-194]
S. S. Furuie, Univ. São Paulo (Brazil); A. R. de Pierro, Unicamp (Brazil); N. A. Mascarenhas, UFSCar (Brazil); J. C. Meneghetti, Univ. São Paulo (Brazil)
- 65105C **A fast 3D reconstruction algorithm for inverse-geometry CT based on an exact PET rebinning algorithm (Cum Laude Poster Award)** [6510-195]
S. R. Mazin, N. J. Pelc, Stanford Univ. (USA)
- 65105D **Implementation of the circle-and-line algorithm for 256-detector row CT** [6510-196]
A. A. Zamyatin, B. Chiang, Toshiba Medical Research Institute USA (USA); A. Katsevich, Univ. of Central Florida (USA); S. Nakanishi, Toshiba Medical Systems Corp. (Japan); M. D. Silver, Toshiba Medical Research Institute USA (USA)
- 65105E **Pre-calculation of the image quality of the simultaneous iterative reconstruction technique** [6510-197]
H. Kunze, W. Härer, K. Stierstorfer, Siemens AG Medical Solutions (Germany)
- 65105F **Hardware acceleration vs. algorithmic acceleration: can GPU-based processing beat complexity optimization for CT?** [6510-198]
N. Neophytou, F. Xu, K. Mueller, Stony Brook Univ. (USA)
- 65105G **GPU accelerated CT reconstruction for clinical use: quality driven performance** [6510-199]
M. S. Vaz, Barco Medical Imaging Systems (USA); Y. Sneyders, Barco Medical Imaging Systems (Belgium); M. McLin, A. Ricker, Barco Medical Imaging Systems (USA); T. Kimpe, Barco Medical Imaging Systems (Belgium)
- 65105H **A fast and high-quality cone beam reconstruction pipeline using the GPU** [6510-200]
T. Schiwietz, Siemens Corporate Research (USA) and Technische Univ. München (Germany); S. Bose, J. Maltz, Siemens Oncology Care Systems (USA); R. Westermann, Technische Univ. München (Germany)

- 65105I **Improvement of the OPED algorithm by means of introducing an integration into the evaluation process** [6510-201]
O. Tischenko, GSF National Research Ctr. for Environment and Health (Germany); Y. Xu, Univ. of Oregon (USA); C. Hoeschen, GSF National Research Ctr. for Environment and Health (Germany)
- 65105J **The Juggler algorithm: a hybrid deformable image registration algorithm for adaptive radiotherapy** [6510-202]
J. Xia, Y. Chen, S. S. Samant, Univ. of Florida (USA)
- 65105K **Metal artifacts correction in cone-beam CT bone imaging** [6510-203]
Y. Zhang, R. Ning, D. Conover, Univ. of Rochester (USA)
- 65105L **Sinogram restoration for ultra-low-dose x-ray multi-slice helical CT by nonparametric regression** [6510-204]
L. Jiang, Univ. of Maryland at College Park (USA); K. Siddiqui, VA Maryland Health Care System (USA); B. Zhu, Y. Tao, Univ. of Maryland at College Park (USA); E. Siegel, VA Maryland Health Care System (USA)
- 65105M **Two-dimensional reconstruction algorithm of an inverse-geometry volumetric CT system** [6510-205]
J. Baek, N. J. Pelc, Stanford Univ. (USA)
- 65105N **FFT and cone-beam CT reconstruction on graphics hardware** [6510-206]
P. Després, M. Sun, B. H. Hasegawa, S. Prevrhal, Univ. of California, San Francisco (USA)
- 65105O **Ray-wise weighted helical cone beam filtered backprojection algorithm for image reconstruction under moderate cone angle** [6510-207]
X. Tang, J. Hsieh, GE Healthcare Technologies (USA)
- 65105P **ECG gated circular cone-beam multi-cycle short-scan reconstruction algorithm** [6510-208]
U. van Stevendaal, P. Koken, Philips Research Labs. (Germany); P. G. C. Begemann, R. Koester, G. Adam, Univ. Hospital Hamburg-Eppendorf (Germany); M. Grass, Philips Research Labs. (Germany)
- 65105Q **Application of fast radon transform to CT scanners: difficulties and solutions** [6510-209]
A. Mitra, S. Banerjee, IIT Kharagpur (India)
- 65105R **A ray-tracing backprojection algorithm for cone beam CT** [6510-210]
J. Lu, T. Pan, M.D. Anderson Cancer Ctr., The Univ. of Texas (USA)
- 65105S **Hardware-accelerated cone-beam reconstruction on a mobile C-arm** [6510-211]
M. Churchill, Brigham Young Univ. (USA); G. Pope, J. Penman, D. Riabkov, X. Xue, A. Cheryauka, GE Healthcare Surgery (USA)
- 65105T **Implementation and evaluation of 4D cone beam CT (CBCT) reconstruction** [6510-213]
D. Yang, R. Ning, Univ. of Rochester (USA); S. Liu, D. Conover, Univ. of Rochester Medical Ctr. (USA)
- 65105U **A statistical approach to high-quality CT reconstruction at low radiation doses for real-time guidance and navigation** [6510-214]
A. Shetye, R. Shekhar, Univ. of Maryland, College Park (USA) and Univ. of Maryland (USA)

- 65105V **Missing data estimation for fully 3D spiral CT image reconstruction** [6510-215]
D. B. Keesing, J. A. O'Sullivan, D. G. Politte, B. R. Whiting, D. L. Snyder, Washington Univ. in St. Louis (USA)
- 65105W **Fast variance predictions for 3D cone-beam CT with quadratic regularization (Honorable Mention Poster Award)** [6510-216]
Y. Zhang-O'Connor, J. A. Fessler, The Univ. of Michigan (USA)
- 65105X **Iterative extended field of view reconstruction** [6510-217]
H. Kunze, W. Härer, K. Stierstorfer, Siemens AG Medical Solutions (Germany)
- 65105Y **Iterative reconstruction for multi-source inverse geometry CT: a feasibility study** [6510-218]
D. Bequé, GE Global Research (Germany); B. De Man, M. Iatrou, GE Global Research (USA)

Author Index

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- 1 Keynote
Jiang Hsieh, GE Healthcare Technologies (USA)
Michael J. Flynn, Henry Ford Health System (USA)
- 2 Dual Energy
Richard L. Van Metter, Eastman Kodak Company (USA)
- 3 Performance Assessment
John A. Rowlands, Sunnybrook and Women's Health Sciences Center,
University of Toronto (Canada)
- 4 Innovative Imaging I
Aldo Badano, U.S. Food and Drug Administration (USA)

- 5 Detector Technology
Michael Overdick, Philips Research Laboratories (Germany)
- 6 Innovative Imaging II
Michael J. Flynn, Henry Ford Health System (USA)
- 7 System Modeling
Christoph Hoeschen, Forschungszentrum für Umwelt und Gesundheit,
GmbH (Germany)
- 8 Cardiac Imaging
Jiang Hsieh, GE Healthcare Technologies (USA)
- 9 X-ray Imaging
Ehsan Samei, Duke University (USA) and Duke University Medical Center
(USA)
- 10 Breast Imaging
Ehsan Samei, Duke University (USA) and Duke University Medical Center
(USA)
- 11 Tomosynthesis
Robert M. Nishikawa, The University of Chicago (USA)
- 12 CT Systems
Bruce R. Whiting, Washington University in St. Louis (USA)
- 13 Signal Corrections
Thomas Flohr, Siemens AG, Medical Solutions (Germany)
- 14 Cone Beam Reconstruction
Jeffrey A. Fessler, University of Michigan (USA)
- 15 Advanced Reconstruction
Katsuyuki Taguchi, Johns Hopkins University (USA)