

SCIENTIFIC PROGRAM



División de Física Médica
SMF
Sociedad Mexicana de Física



14th Mexican Symposium on Medical Physics

ORAL SESSIONS

Friday March 18 2016

9:00-17:00	Onsite registration		
15:00-17:00	Session 1A: Brachytherapy Physics and Computational Method Moderator: Firas Mourtada		
15:00-15:40	Importance of HDR Source Calibration and Measurement	Larry A. DeWerd and Wesley Culberson	In-BTP-ID40
15:40-16:00	Dosimetric Quality of Partially Loaded I-125 COMS Eye Plaques for Practical Placement on Posterior Tumors	Clara Ferreira, Chance Matthiesen, Brian Firestone, Salahuddin Ahmad and Tania De La Fuente Herman	Or-BTP-ID44
16:00-16:20	Dosimetric Evaluation of Tissue Heterogeneity for Electronic Brachytherapy (EBT) source in High Dose Rate Gynecological (GYN) Irradiation	Taylor William, Daniel Johnson, Mark Johnson, Salahuddin Ahmad and Yong Chen	Or-BTP-ID51
16:20-16:40	Total and secondary electron fluence spectra in LiF generated by low-energy photons and its influence in the absorbed dose	Alexis Cabrera-Santiago and Guerda Massillon-JL	Or-DRMP-ID118

16:40-17:00	Automatic Detection of Coronary Artery Stenosis in X-ray Angiograms using Gaussian Filters and Genetic Algorithms	Fernando Cervantes-Sanchez, Ivan Cruz-Aceves and Arturo Hernandez-Aguirre	Or-CMMA-ID96
15:00-17:00	Session 1B: Physiological Measurements and Computational Method Moderator: Ruben Fossion		
15:00-15:40	Investigating the effect of cognitive stress on the cardiorespiratory synchronization with synchrogram and empirical mode decomposition analysis via case studies	Maia Angelova, Philip M. Holloway, Laurie Rauch, Stefano Scribani, Alan St.Clair Gibson, Emmanuel Landa, Irving O. Morales, Ruben Fossion and Alejandro Frank	In-PM-ID143
15:40-16:00	Cross recurrence plot analysis of heart rate and systolic blood pressure during supine position and active standing in healthy adults and renal failure patients	Hortensia González, Oscar Infante and Claudia Lerma	Or-PM-ID70
16:00-16:20	Identification and quantification of metabolites in exhaled breath and correlation with physiological parameters of a sample population	Katya Patricia Vazquez Rivera, A. M. Gallegos, J. M. Hernández, A. Monroy, Y. Mares and A. M. Juárez	Or-PM-ID142
16:20-16:40	Wavelet Analysis on Electroencephalographic Time Series to Identify Key Patterns Corresponding to Arm Movements for Brain-Computer Interface	Luke Goodman, Eduardo Moreno Barbosa, Javier Hernández López and Benito de Celis Alonso	Or-CMMA-ID24
16:40-17:00	Diagnosis of ADHD children by Wavelet analysis	José Gerardo Suárez García, Javier Miguel Hernández López, Eduardo Moreno Barbosa, José Ramos Méndez and Benito de Celis Alonso	Or-CMMA-ID26
17:00-18:30	Poster sessions I / Coffee break		
PLENARY TALK I Moderator: Larry DeWerd			
18:30-19:30	An Efficient Approach To Commission Model-Based Dose Calculation Algorithms for Brachytherapy	Firas Mourtada	PI-BTP-ID27
19:30-21:00	Opening Ceremony		

Saturday March 19 2016

9:00-17:00	Onsite registration		
9:00-10:40	Session 2A: Radiation Dosimetry Moderator: Guerda Massillon-JL		
9:00-9:20	Development of a polystyrene calorimeter for CT and therapy photon beams	H. H. Chen-Mayer, F. B. Bateman and R. E. Tosh	Or-DRMP-ID61
9:20-9:40	Calibration and Correction Factors of a Set of Semiconductor Diodes for its Use in External Radiation Therapy	Karen González-Pérez, Evangelina Figueroa-Medina and Isabel Gamboa-deBuen	Or-DRMP-ID85
9:40-10:00	Impact evaluation in calculating dose distribution due to specific detector factor for non-conventional fields	M. A. Rodríguez Ávila, O. A. García-Garduño and J.M. Lárraga-Gutiérrez	Or-DRMP-ID104
10:00-10:20	Gel Dosimetry Enables Volumetric Evaluation of Dose Distributions from an MR- Guided Linac	Geoffrey S. Ibbott, Yvonne Roed, Hannah Lee, Mamdooh Alqathami, Jihong Wang, Lawrence Pinsky, and Anton Blencowe	Or-DRMP-ID138
10:20-10:40	National Calibration and Measurement Capabilities (CMC) for Air Kerma K_{\square} , Personal Equivalent Dose $H_p(10)$ and Ambient Equivalent Dose $H^*(10)$ in ^{137}Cs Energy Applied to Radiological Protection Supported by Primary Standards	Jose Trinidad Álvarez Romero, M. R. Cabrera Vertti, V. M. Tovar Muñoz and D. Cruz Hernández	Or-DRMP-ID20
9:00-10:20	Session 2B: Ultrasound Physics and Computational Method Moderator: James A. Zagzebski		
9:00-9:40	Changes in Cervical Stiffness during Pregnancy: Preliminary Assessment with Shear Wave Elastography Imaging in the Rhesus Macaque	Ivan M. Rosado-Mendez, Andrew Santoso, Swetha Subramanian, Quinton W. Guerrero, Lindsey C. Drehfal, Sarah Kohn, Michele Shotzko, Mark Palmeri, Helen Feltovich and Timothy J. Hall	In-ULP-ID50
9:40-10:00	Acoustic Visual and Computerized analysis of Phonocardiograms	J.Granados Samaniego, F. Tavera Romero, G. López González, J. M. Velázquez Arcos and R. T. Hernández López	Or-ULP-ID115

10:00-10:20	Discordant alternans in one dimensional cable of ischemic heart tissue	Yunuen Cervantes Espinosa and Humberto Arce Rincón	Or-CMMA-ID95
10:40-12:10	Poster session II / Coffee break		
Plenary Talk II Moderator: Ivan Mendez Rosado			
12:10-13:10	Quantitative Ultrasound: Enhancing Diagnosis using Estimates of Acoustic Attenuation and Backscatter Properties of Tissue	James A. Zagzebski	PI-ULP-ID135
13:10-14:40	Lunch / Varian Medical System's Symposium		
14:40-16:40	Session 3A: External Radiation Therapy Physics Moderator: Indra Das		
14:40-15:20	Small Field Dosimetry: What Have We Learnt	Indra J. Das, Johnny Morales and Paolo Francescon	In-ERTP-ID30
15:20-15:40	Comparison of Volumetric Modulated Arc Therapy (VMAT) and Intensity Modulated Radiotherapy (IMRT) Plannings for the Treatment of Left Sided Breast and Regional Lymphatic Tissue	Sabbir Hossain, Mohammad R Islam, Gabriel Lee, Christine Higby, Salahuddin Ahmad and Ozer Algan	Or-ERTP-ID22
15:40-16:00	Evaluation of plaster bandage as bolus material for skin treatments using a 6MV photon beam	Erick O. Montenegro, Luis G. García, Ricardo E. Contreras , Erick E. Hernández, Juan F. Lucero, Rafael E. Lengua and Luis A. Linares	Or-ERTP-ID38
16:00-16:20	Verification of Dose in Radiotherapy	M. Asghar Gadhi, S. Fatmi, M. Arshad, M. Shakil and S. A. Buzdar	Or-ERTP-ID57
16:20-16:40	National Calibration and Measurement Capability for Radiotherapy ionization chambers in terms of Absorbed Dose to Water D_w in ^{60}Co Energy	D. Cruz Hernández, J. T. Álvarez Romero and V. M. Tovar Muñoz	Or-ERTP-ID25
14:40-16:00	Session 3B: Magnetic Resonance Physics Moderator: Silvia Hidalgo Tobon		
14:40-15:20	Functional MR imaging (BOLD and resting states). Clinical and research applications	Benito de Celis Alonso	In-MRP-ID29

15:20-15:40	Ferrites as for Magnetic Fluid Hyperthermia and as MRI Contrast Agents	Silvia Hidalgo-Tobón, Fernando Arteaga-Cardona, Miguel Ángel Méndez Rojas and Umapada Pal	Or-MRP-ID43
15:40-16:00	1-Dimensional Ice is Source of High MRI Cartilage Contrast Using Magic Angle Dependence of Spin-Spin (T2) Relaxation	Gary D. Fullerton	Or-MRP-ID82
17:00-18:30	Poster session III / Coffee break		
Plenary Talk III Moderator: Cari Borrás			
18:30-19:30	New ICRP Publication 131: Stem cell biology with respect to carcinogenesis aspects of radiation protection	Jolyon H. Hendry	PI-RRPP-ID149

Sunday March 20 2016

9:00-10:40	Session 4A: Radiobiology, Radiation Imaging and Nuclear Medicine Physics Moderator: Miguel Angel Avila Rodriguez		
9:00-9:20	Effects of the whole-brain irradiation on the Visual Evoked Potentials in rats	Zareth Ortiz Arzate, Paola Ballesteros Zebadúa, Javier Franco Pérez, Joaquín Manjarrez Marmolejo, Carlos Gerardo Treviño Palacios, Miguel Ángel Camacho López and Rigoberto Oros Pantoja	Or-RRPP-ID101
9:20-9:40	Characterization of a microCT for preclinical studies using contrast-enhanced digital subtraction images	Francisco Berumen-Murillo, Lízbeth Ayala-Domínguez, Luis-Alberto Medina and María-Ester Brandan	Or-RIP-ID91
9:40-10:00	Image quality and mean glandular dose in Mexican mammography services measured with an object-insert/TL mammography kit	E. López-Pineda, C. Ruiz-Trejo and María-Ester Brandan	Or-RIP-ID110
10:00-10:20	Optimization of dual energy subtraction for angiogenesis studies in rodents using a commercial micro-CT unit	Jorge P. Castillo López, L. Corona-Nieblas, F. Berumen, L. Ayala, L. A. Medina and María-Ester Brandan	Or-RIP-ID113

10:20-10:40	Cyclotron production of ^{58}Co for Auger-based targeted radioimmunotherapy	Hector F Valdovinos, Reinier Hernandez, Shreya Goel, Stephen Graves, Todd Barnhart, Weibo Cai and Robert J Nickles	Or-NMP-ID94
9:00-11:00	Session 4B: Computational Methods in Medical Applications Moderator: Frederic Tessier		
9:00-9:40	Implementing and testing transport in magnetic fields in the EGSnrc Monte Carlo simulation software	Frédéric Tessier, Hugo Bouchard and Ernesto Mainegra-Hing	In-CMMA-ID148
9:40-10:00	Entropic closure for transport of energetic particles for radiotherapy	Jean-Luc Feugeas, Philippe Nicolai, Jérôme Caron, Bruno Dubroca, Guy Kantor, Gabriele Birindelli, Jonathan Page, Teddy Pichard and Vladimir Tikhonchuk	Or-CMMA-ID42
10:00-10:20	Acquisition Software Development for the Analysis of Holter Prototype Signals and its use for Pre-diagnosis of Cardiac Damage Based on Nonlinear Dynamic Techniques	J. A. Zamora Justo, R. A. Gutiérrez Calleja and A. Muñoz Diosdado	Or-CMMA-ID53
10:20-10:40	Computational tools for extracting, Representing and analyzing facial features	Saúl Heredia, Miguel Padilla, Alfonso Gastelum, Patrice Delmas and Jorge Márquez	Or-CMMA-ID67
10:40-11:00	Early warnings in a numerical model of atrial fibrillation	D. García Gudiño, J. Mendoza-Temis, J. C. Toledo-Roy, I. O. Morales, E. Landa, A. L. Rivera, R Fossion and A. Frank	Or-CMMA-ID97
11:00-12:30	Poster session IV/ Coffee break		
12:30-13:30	Medical Physics Division Meeting		
13:30-14:40	Lunch		
14:40-16:00	Special Education Session Moderator: Luis Alberto Medina		
14:40-15:00	Clinical training residency programs in Mexico: Next step in the formation of medical physicists	Luis Alberto Medina and María Ester Brandan	Sp-Edu-ID117

15:00-15:20	SDAMPP Addresses Diverging Educational Requirements: Professional versus Traditional Academic Medical Physics Education	Gary D Fullerton	Sp-Edu-ID81
15:20-15:40	Everything medical physicists always wanted to know about appropriate technology but were afraid to ask	Cari Borrás	Sp-Edu-ID137
15:40-16:00	The ICRU - Past Present and Future	Paul M. DeLuca, Jr. and Hans-Georg Menzel	Sp-Edu-ID28
16:00-17:00	Special Event: to be announced		
Plenary Talk IV Moderator: Guerda Massillon-JL			
17:00-18:00	Contrast enhanced digital mammography and the study of angiogenesis in breast lesions	Maria Ester Brandan	PI-RIP-ID134
20:00-23:00	Gala Dinner		

Monday March 21 2016

9:30-11:10	Students Session: Best Paper Award Moderator: Maria Ester Brandan		
9:30-9:50	Recognition of activities of daily living based on the vertical displacement of the wrist	Sergio Parra-Sánchez, Juan Manuel Gómez- González, Irais A. Quintero Ortega, Birzabith Mendoza-Novelo, Jorge Delgado-García, Mayra Cuellar Cruz and Arturo Vega-González	BPA-OT-ID112
9:50-10:10	Commissioning of a Relative Stopping Power to Hounsfield Unit Calibration Curve for a Mevion Proton Radiation Treatment Unit	Erich Schnell, Salahuddin Ahmad, and Tania de la Fuente Herman	BPA-ERTP-ID32
10:10-10:30	Explorative geometrical RUS Study of Bone Phantoms Considering Load Variations	P. A. I. Hernández-Becerra, I. Delgadillo-Holtfort, D. Ramirez-Infante, M. Balleza-Ordaz, M. R. Huerta-Franco and M. Vargas-Luna	BPA-ULP-ID133

10:30-10:50	Four dimensional analysis of blood flow velocity in pediatric patients with repaired tetralogy of Fallot	Guadalupe Sagaon Rojas, Silvia S. Hidalgo Tobón, Pilar Dies S., Porfirio Ibáñez F., Manuel Obregón E. and Julio García	BPA-MRP-ID93
10:50-11:10	Challenges and opportunities in calorimetry for clinical radiation dosimetry	E. Flores-Martinez, M. Malin, J. Radtke, L. DeWerd	BPA-DRMP-ID127
11:10-11:30	Awards and closing ceremony		
12:00	Trip to Teotihuacan		

POSTER SESSIONS

Friday March 18 2016

17:00-18:30

Poster sessions I

Brachytherapy Physics

The SSDL-ININ Calibration and Measurement Capability (CMC) to Reference Air Kerma K_R in ^{192}Ir to HDR for Well Chambers	José Trinidad Álvarez Romero, V. M. Tovar Muñoz and D. Cruz Hernández	Po-BTP-ID23
Fast 3D Modelling of Dose Distribution in Brachytherapy	Philippe Nicolaï, Jean-Luc Feugeas, Bruno Dubroca, Gabriele Birindeli, Jonathan Page, Jérôme Caron, Teddy Pichard and Vladimir Tikhonchuk	Po-BTP-ID41

Physiological Measurements

Loss of complexity of EEG functional brain networks with human aging	O.A. Lecona, A. Hernández Fuentes, R. Cruz Garduño, B. Méndez Ambrosio, F. Fernández de Miguel and R. Fossion	Po-PM-ID145
Statistical study of the fluctuations in the heart rhythm in people of different ages in rest and with physiological stress	L.A. Álvarez Millán and R. Fossion	Po-PM-ID147
Absence of Synemin, Causes Hypertrophy in Mice Heart	Karla P. García-Pelagio, Ling Chen and Robert J Bloch	Po-PM-ID34

Analysis of heart rate oscillations during meditation and non-meditation periods using theory of complex networks	Jose Alberto Rosales Pérez, Efrain Canto Lugo and Rodrigo Huerta Quintanilla	Po-PM-ID64
Temperature measurements in healthy and diabetic tissues	Estefanía Quecholac Guerrero, Benito De Celis Alonso , Guillermo Tejeda Muñoz and Eduardo Moreno Barbosa	Po-PM-ID68
Pulse and Breath Rate Analysis base on Eulerian Motion Magnification	Marisol Plata, Marcela Bonell and E. Ulises Moya-Sanchez	Po-PM-ID90

Saturday March 19 2016

11:00-12:30

Poster session II

Optical Physics

Early evaluation of characteristic metabolic heat patterns, registered by infrared imagenology	E. I. Fuentes Oliver, C. García Segundo, R. Serrano Loyola, R. Solalinde Vargas and A. Gastélum Strozzi	Po-OP-ID60
Retinal oximeter	Karla J. Sánchez-Pérez, Javier Herrera-Vega, Felipe Orihuela-Espina and Carlos G. Treviño-Palacios	Po-OP-ID66

Dosimetry and Radiation Measurement Physics

Thermoluminescent Dosimetry in Computed Tomography for Pediatric Patients	Ali Cesar Medrano Sandoval, Omar Medina Arreguin, Silvia S. Hidalgo Tobon , Pilar Dies-Suarez and Juan Azorin Nieto	Po-DRMP-ID100
In-vivo Semiconductor Diode Dosimetry in Total Skin Irradiation Electron Therapy	Karen González-Pérez, Iván Licon, Evangelina Figueroa-Medina and Isabel Gamboa-deBuen	Po-DRMP-ID106
Variations in the response of the Radiochromic film EBT3 with the size of radiation field and its influence on total scatter factors (TSF) from small radiation fields	Fátima Escarcia-Castillo, O. A. García-Garduño and Alfredo Herrera González	Po-DRMP-ID49
Clinical Experience with a Novel Reference Chamber "Stealth Chamber" by IBA	Luis Vazquez, Claudia Huerta, Oscar Calvo and Dharanipathy Rangaraj	Po-DRMP-ID72

Electromagnetic radiation damage on the human health	R. Silva-Quiroz, R. Lavin, E. Lopez, A. Zúñiga, A. Biberos, J. Garcia and A.L. Rivera	Po-DRMP-ID86
Response of EBT3 Gafchromic Films Exposed to High Energy Electrons	Marisol Molina-Romero, Evangelina Figueroa-Medina and Isabel Gamboa-deBuen	Po-DRMP-ID89
Evolution of the effective photon energy inside PMMA pediatric phantoms, measured with TLD-300	Alianna Gómez-Facenda, Iván-Domingo Muñoz-Molina, Eduardo López-Pineda and María-Ester Brandan	Po-DRMP-ID99
Structure of depth-dose curves of small radiotherapy fields	Eduardo Antonio González-Villa and José M. Lárraga-Gutiérrez	Po-DRMP-ID125
17:00-18:30	Poster session III	
External Radiation Therapy Physics		
A radiotherapy protocol in a rat model of glioblastoma using an X-ray Ortovoltage system	O. Canseco-Hernández, I. M. Torres-Viquez, M. Llaguno-Munive, M. Rodríguez Ponce and L. A. Medina	Po-ERTP-ID105
Measurement of absorbed dose distribution in water for a CyberKnife unit using radiochromic EBT3 Film	A. Hernández-Guzmán, N. Aragón-Martínez, A. Gómez-Muñoz and G. Massillon-JL	Po-ERTP-ID136
A Phantom to Study the Effect of Metallic Prostheses in IMRT by Gel Dosimetry	Diana Maritza Cuevas Rojas, Juliana Pavoni and Oswaldo Baffa	Po-ERTP-ID54
Determining of Electron Clinical Spectra from Percentage Depth Dose (PDD) Data of Broad Beams	Jorge H.W.Visbal and Alessandro M. Da Costa	Po-ERTP-ID55
Magnetic Resonance Physics		
Magnetic Resonance Imaging study of morphometric parameters in patients with progressive supranuclear palsy, multiple system atrophy and Parkinson's disease	O. R. Marrufo-Melendez, C. Mejias, R. D. Delgado, P. Salgado, J. Taboada, A. O. Rodriguez and R. Martin	Po-MRP-139
Changes in Brain Magnetic Resonance Spectroscopy induced by Aging	María Margarita López Titla, María de Lourdes Martínez Gudiño and Sarael Alcauter Solorzano	Po-MRP-ID116

fMRI study for blind pediatric subjects	Coral Guerrero Arenas, Silvia S. Hidalgo Tobón, Pilar Dies S., Eduardo Castro Sierra and Benito de Celis Alonso	Po-MRP-ID121
Electromagnetic interaction simulation of a parallel-plate waveguide and Helmholtz gradient coils in low field Magnetic Resonance Imaging systems	F Vazquez, S. Solis-Najera, R. Martín and A. O. Rodríguez	Po-MRP-ID111
B1 uniformity correction of a slotted-endring volume coil with mean-shift filtering operating at 4 Tesla	J. R. Jimenez, S. E. Solis, T Dardo and A. O. Rodriguez	Po-MRP-ID108
Gradient coils with flat geometry for open Magnetic Resonance Imaging systems	González Zamora Leticia and Hidalgo Tobón Silvia S.	Po-MRP-ID123
Resting State fMRI maps of patients with Frontotemporal Dementia	D. Plata, R. Carrillo, J. Taboada, R. Martin, A. O. Rodríguez and O. Marrufo	Po-MRP-ID141
Induced currents due to the variation of magnetic fields in systems for magnetic resonance imaging in tattoos.	Estefania Reyes Soto, Leonardo Medel, Pavel Oropeza, Ignacio Camarillo, Pilar Dies and Silvia S. Hidalgo-Tobón	Po-MRP-ID92

Sunday March 20 2016

17:00-18:30

Poster session IV

Computational Methods in Medical Applications

Computer vision system for the evaluation of the Schober test	Alfonso Gastelum Strozzi, Miguel A. Padilla Castañeda, Roch Bernardini, Juan Salvador Perez Lomeli, Fernando Arambula Cosío, Jorge Marquez Flores and Rubén Burgos-Vargas	Po-CMMA-ID130
Tomographic reconstruction algorithm using CUDA	Tomas A. Valencia Pérez, Javier M. Hernández López, Eduardo Moreno Barbosa, Mario I. Martínez Hernández and Benito de Celis Alonso	Po-CMMA-ID39
Quantitative study of the differences in mitochondrium distribution between DENV infected and mock cells	Juan Carlos Cardona and Juan Carlos Gallego-Gómez	Po-CMMA-ID45

Nonlinear Dynamics Methods for Tachogram Series Analysis based on Detrended Fluctuation Analysis and Higuchi's Fractal Dimension	Ramón Alejandro Gutiérrez Calleja, José Alberto Zamora Justo and Alejandro Muñoz Diosdado	Po-CMMA-ID52
Monte Carlo simulation of a Positron Emission Mammography scanner	Luis Fernando Torres Urzúa, Héctor Alva Sánchez, Arnulfo Martínez Dávalos and Mercedes Rodríguez Villafuerte	Po-CMMA-ID62
Modeling the effects of magnetic fields on clinical brachytherapy with Monte Carlo methods.	Fernando Moreno Barbosa, Javier M. Hernández López, Benito de Celis Alonso and José Ramos Méndez	Po-CMMA-ID84
Automated Bone Segmentation by a Gaussian Modeled Threshold	Hugo Aguirre Ramos, Juan Gabriel Avina Cervantes and Iván Cruz Aceves	Po-CMMA-ID87
Radiobiology and Radiation Protection Physics		
Monte Carlo Calculations of Absorbed Doses Associated to CT Scans	Geovanny Santiago Yépez Yáñez, María Yolanda Défaz Gómez and Marco Vinicio Bayas Rea	Po-RRPP-ID102
Quality Management Perspective and Risk Analysis for Head & Neck IMRT/VMAT: a multi-institutional trial	Evangelina Figueroa-Medina, Mariana Hernández-Bojórquez and Andrei N. Mendoza-Sánchez	Po-RRPP-ID109
Feed Variation and Biometrical Factors in Tilapias (<i>Oreochromis niloticus</i>) Exposed to ⁶⁰ Co Gamma Radiation	Rodrigo S. Giarola, Fernando H. R. Borin, Joel M. Hormaza, Marco A. R. Fernandes, Paulo R. R. Ramos and Helton C. Delicio	Po-RRPP-ID80
Average lung dose and epithelitis in patients of breast cancer radiotherapy: Analysis of the relevant variables	Diego Cueva-Prócel, Mónica Silva-Villacreses and Carmen Vasconez-Donoso	Po-RRPP-ID83
Radiation Imaging Physics		
Pixel type detectors for the development of a diagnostic system of high-resolution for micro tumors	Maria del Carmen Grados Luyando, B. de Celis Alonso, G. Tejeda Muñoz and J. Ramos Méndez	Po-RIP-ID31
Effective Atomic Number and Electron Density Calibration with a Dual-Energy CT Technique	C. D. Trujillo-Bastidas, O. A. García-Garduño, J. M. Lárraga-Gutiérrez, A. Martínez-Dávalos, M. Rodríguez-Villafuerte	Po-RIP-ID75

Nuclear Medicine Physics

Dynamic PET imaging for quantitative evaluation of kinetic parameters in a model of breast cancer in rats	Lízbeth Ayala-Domínguez, Mario Romero Piña, Luis-Alberto Medina and María-Ester Brandan	Po-NMP-ID122
Effect of reconstruction parameters and ROI definition on standardized uptake value quantification in tumors	Alberto Reynoso, Sarahí Rosas, Iván Díaz-Meneses and Nora E. Kerik	Po-NMP-ID129
Studies of Positron Range in Tissue-Equivalent Materials	Héctor Alva-Sánchez, Christian Quintana-Bautista, Arnulfo Martínez-Dávalos, Miguel Ángel Ávila-Rodríguez and Mercedes Rodríguez-Villafuerte	Po-NMP-ID63
Compartmental modeling of F-DOPA PET images from Parkinson's patients	Sarahí Rosas G., Alberto Reynoso M., Osbaldo Lopez C., Ignacio Cruz V., Rita Osorio D., Iván Díaz, Ana Laura Pesquera, María Elena Bernal, Antonio Manzo and Nora Kerik Rotenberg	Po-NMP-ID98