
First International Conference and School on Radiation Imaging

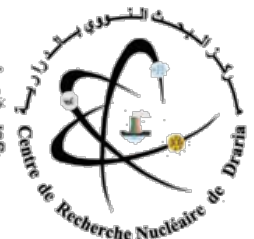
SETIF, SEPTEMBER 26-30, 2021

Ferhat Abbas-Setif1 University-UFAS

Faculty of Sciences

In partnership with the Atomic Energy Commission-COMENA

ALGERIA



Program

Scientific Program of the Conference

Sunday, September 26 th , 2021		
08h00 08h30	Opening Ceremony	
Oral Session 1 : Non-medical Radiation Imaging		
08h30 09h00	<p style="text-align: center;"><u>Invited Speaker 1 :</u> Dr. Burkhard Schillinger Technical University of Munich- FRM II, Heinz Maier-Leibnitz Centre, Germany <i>Neutron Imaging with cold and with fast fission neutrons at the FRM II reactor of Technische Universität München</i></p>	
09h00 09h20	<p>S. Sebold Neutron Imaging Group, MLZ, Garching, Germany <i>Neutron grating interferometry as an advanced neutron imaging method at ANTARES</i></p>	Chairman : Dr. Tahar Zidi
09h20 09h40	<p>B. Sayah Physical and Nuclear Applications Division, Nuclear Research Centre of Draria, Algeria <i>Fast Neutron Radiography feasibility study around NUR Neutron Radiography Facility Using CR-39 SSNTD</i></p>	
09h40 10h00	<p>S. Taleb Industrial Technologies Research Centre, Algiers, Algeria <i>Detection of straw defect by the region growing approach</i></p>	
10h00 10h20	<p>L. Boukerdja Nuclear Research Centre of Birine, Algeria <i>Sensitivity assessment of a neutron imaging system based on a CCD camera</i></p>	
10h20 10h30	Break	
Poster Session1: Non-medical Imaging		
10h30 10h40	<p>O. Dendene Nuclear Research Centre of Birine, Algeria <i>Theoretical Characterization Study of a Converter Screens Used in Neutron Radiography</i></p>	Chairman : Pr. Hacene Azizi
10h40 10h50	<p>N. Osmani Department Neutron Transmutation Doping of Silicon, Nuclear Research Centre of Birine, Algeria <i>Neutron irradiation effects on topological properties of CZ-Silicon (CZ-Si)</i></p>	
10h50 11h00	<p>S. Refoufi Intelligent Systems Laboratory, Faculty of Technology, Ferhat Abbas University, Setif, Algeria <i>Intelligent vision navigation of Pioneer 3-DX mobile robot</i></p>	
11h00 11h10	<p>A. Bourenane Nuclear Research Centre of Birine (CRNB), Algeria <i>Nuclear fuel assemblies' investigation by PGET technique, development of in-house code to reconstruct tomographic projections and automatic find mismatches</i></p>	

11h10 11h20	C. Ghaoues Laboratory of Dosing, Analysis, and Characterization with high resolution, Department of Physics, University of Setif1, Algeria <i>Preparation and Characterization of CaFeO3 Powder for photocatalytic application under visible irradiation</i>	
11h20 11h30	A. Terbouche Laboratory of Dosing, Analysis, and Characterization with high resolution, Department of Physics, University of Setif1, Algeria <i>Morphological and structural properties of CZTS thin film absorbers</i>	
11h30 11h40	M. Ghemid Laboratory of Dosing, Analysis, and Characterization with high resolution, Department of Physics, University of Setif1, Algeria <i>The effect of HCl addition on the microstructural and photocatalytic properties of ITO thin films</i>	
11h40 12h50	T. Khatir LPQSD, Department of Physics, Faculty of Sciences, University Sétif1, Setif, Algeria <i>Morphological study of Cu2O nanostructures</i>	
11h50 12h00	F. Houda Laboratory of Condensed Matter Physics and Nanomaterials, Department of Physics, Faculty of Exact Sciences and Technology, Mohamed Seddik Ben Yahiya University, Jijel, Algeria <i>Effect of Polyvinyl alcohol (PVA) on the morphology of Hematite α-Fe₂O₃ thin films Scanning Electron Microscope Study</i>	
12h00 13h30	Break	
Oral Session 2 : Radiation Imaging Methods and Systems Development		
13h30 13h50	F. Mernache Nuclear Research Center of Draria, Algiers, Algeria <i>A Homemade image analysis software use in UO₂ mean grain size estimation</i>	Chairman: Dr. Layachi Boukerdja
13h50 14h10	H. Cherief Laboratory of Energy and Intelligent Systems, University of Khemis Miliana, Algeria <i>Simulation of new inorganic scintillators for computed tomography medical imaging</i>	
14h10 14h30	A. Sehisseh Nuclear Research Centre of Draria, Algeria <i>Particle size characterization by image analysis of an iron silicate FESI crushed powders</i>	
14h30 14h50	M. L. Yahiaoui Nuclear Research Centre of Birine, Djelfa, Algeria <i>Neutron imaging denoising with a deep learning method</i>	
14h50 15h10	O. Al-Dhuhuri and S. Al-Falahi Sultan Qaboos University, Oman <i>Recent advances and Future Directions in Mammography imaging - Technological and Clinical Aspects</i>	

15h10 15h20	Break	
Poster Session2: Medical Imaging		
15h20 15h30	N.E.H. Bourai Department Computer Sciences, Badji Mokhtar University, Annaba, Algeria <i>Convolutional neural networks for medical image Compression: Survey</i>	Chairman: Dr. Bilal Sari
15h30 15h40	M. Boukabcha Department of Biology, Faculty of Nature and Life Sciences, University of Chlef, Chlef, Algeria <i>The role of ultraviolet radiation exposure in skin cancer patients in the Algerian population: Case of Chlef region</i>	
15h40 15h50	A.Z. Messalti Computer Science Department, Faculty of Sciences, University of Setif1, Algeria <i>Breast cancer classification</i>	
15h50 16h00	D.M. Khalal Laboratory of Dosing, Analysis and Characterization with high resolution, Department of Physics, University of Setif1, Algeria <i>Dose calculation using cone beam CT acquisitions for radiotherapy treatment</i>	
16h00 16h10	K. Sari Department of Physics, Faculty of Science, Ferhat Abbas-Setif1 University, Algeria <i>Evaluation of Effective Delivered Dose from Computed Tomography Head Scans by OSL&TL dosimetry</i>	
16h10 16h20	Break	
Oral Session 3 : Radiation Imaging Simulation and Modeling		
16h20 16h40	W. Titouche Nuclear Research Centre of Birine, Djelfa, Algeria Neutron beam characterization at the neutron radiography facility of Es-salam research reactor by Monte Carlo simulations	Chairman: Dr. Seif Eddine Allah Chouaba
16h40 17h00	Y. Bouaichaoui Nuclear Research Centre of Birine, Algeria <i>Overview of tracers' techniques using in CFD modeling of Boron Behaviour and Pressurized thermal shock</i>	
17h00 17h20	F. Bezoubiri Medical Physics Department, Radiology Physics Division, Nuclear Research Centre of Algiers, Algeria. <i>Simulation of dynamic 18FDG PET images for lesion detectability investigation using kinetic modeling and XCAT phantom</i>	
17h20 17h40	F. Kharfi Department of Physics, Faculty of Science, University of Setif 1, Algeria <i>Monte-Carlo Code for modeling and simulation of tomographic image</i>	

Monday, September 27th , 2021

Oral Session 4 : Medical Imaging, Molecular Imaging, and Nuclear Medicine

08h00 08h30	<u>Invited Speaker 2:</u> Pr. Habib Zaidi PET Instrumentation & Neuroimaging Laboratory, Geneva University Hospital, Switzerland <i>The emerging role of deep learning in multimodality image analysis</i>	Chairman: Pr. Habib Zaidi
08h30 08h50	M. Lahlabou Radiotherapy Department, HCA Hospital, Kouba, Algiers, ALGERIA. <i>Commissioning of LDR brachytherapy TPS using Gafchromic</i>	
08h50 09h10	I. Shiri Division of Nuclear Medicine and Molecular Imaging, Department of Medical Imaging, Geneva University Hospital, CH-1211 Geneva 4, Switzerland <i>Towards Routine PET Image Artifact Detection and Correction using Deep Convolutional Neural Networks</i>	
09h10 09h30	B. A. Bouchikhi Laboratory of Analysis and Applications of Radiation LAAR, University of Science and Technology of Oran (USTO), Algeria <i>Monte Carlo simulation using the GATE /GEANT4 platform for breast imaging, and dose calculation</i>	
09h30 09h50	A. Bentaibi Department of Radiotherapy, HCA hospital, Kouba, Algiers, Algeria <i>A simple method for an a-Si EPID characterization allowing the passage from image-guided to dose-guided radiotherapy</i>	
09h50 10h10	A. Sanaat Division of Nuclear Medicine & Molecular Imaging, Geneva University Hospital, CH-1211, Geneva, Switzerland <i>DeepGATE: A Multilayer Perceptron Model for the Assessment of PET Spatial Resolution and Sensitivity using Monte Carlo Simulations</i>	
10h10 10h20	Break	

Oral Session 5 : Advanced Imaging and Image Processing Methods

10h20 10h50	<u>Invited Speaker 3:</u> Dr. Yassine Bouchareb COM&HS, Sultan Qaboos University, Oman <i>Artificial Intelligence Approaches in Medical Imaging and Their Impact on patient outcomes - Strengths, Weaknesses, Opportunities and Threats</i>	
10h50 11h10	F. Berrimi Department of Computer Science, Faculty of Sciences, University of Ferhat Abbas, Setif, Algeria <i>Performance of machine learning for face recognition</i>	
11h10 11h30	H. Al-Jafri and N. Al-Ghafri Sultan Qaboos University, Oman <i>Advances and Trends in Magnetic Resonance Imaging- The Technological and Practical Differences between 3T and 1.5T MR imaging</i>	

11h30 11h50	D.M. Khalal Laboratory of Dosing, Analysis and Characterization with high resolution, Department of Physics, University of Setif1, Algeria <i>Applications of Artificial Intelligence in Radiation Therapy</i>	Chairman: Dr. Yasmine Bouchareb
11h50 12h10	M. Al-Jabri, K. Al-Ghafri and T. Al-Shukairi Sultan Qaboos University, Oman <i>Recent Advances in Fluoroscopy Imaging – Technology, Applications and Challenges</i>	
12h10 13h30	Break	
Oral Session 6 : Image Processing and Data Analysis Techniques		
13h30 13h50	N. Frahta Sciences and Technology Department, Setif-1 University, Setif, Algeria <i>A Robust Deep Model Based on the Attention Mechanism for the Classification of X-ray images Chest of Covid-19's Patients</i>	Chairman: Dr. Djamel Eddine Chouaib Belkhiat
13h50 14h10	B. Mansouri University of Saida, Algeria <i>Fourier Synthesis For Image Reconstruction using Bayesian Total Variation and Hidden Markov Model</i>	
14h10 14h30	D.M. Khalal Department of Physics, University of Setif1, Algeria <i>Automatic segmentation of liver in CT images using U-Net</i>	
14h30 14h50	H. Zouaoui Department of Computer Science, University of Sétif1, Algeria <i>Segmentation of MRI images by the algorithm FPSO-FPCM for detection of multiple sclerosis</i>	
14h50 15h10	W. Boukellouz National Higher School of Computer Sciences, Algiers, Algeria <i>An auto-encoder model for segmenting brain tumours from magnetic resonance images</i>	
15h10 15h30	Y. Azzi Department of Computer Sciences, Ferhat Abbas Setif1 University, Algeria <i>Medical Image Analysis and Brain Tumor Segmentation in Magnetic Resonance Images with Deep Learning</i>	
15h30 15h40	Break	
15h40 16h00	H. Saadi Department of Computer Sciences, Badji Mokhtar University, Annaba, Algeria <i>Multi-Agents segmentation for Mammography</i>	
16h00 16h20	I. Mehidi Laboratory of Dosing, Analysis and Characterization with high resolution (LDAC), University of Setif1, Algeria. <i>Retinal Blood Vessel Image Segmentation by Common Algorithms: Performance Analysis</i>	

16h20 16h40	I. Bouharati Department of Radiology, Faculty of Medicine, Ferhat Abbas-Sétif1 University, Sétif, Algeria <i>Urinary tract imaging: Intelligent analysis</i>	Chairman: Pr. Fayçal Kharfi
16h40 17h00	A. Lebal Department of Mathematics and Computer Science, Amar Telidji University, Laghouat, Algeria <i>Attention ResNet model for Alzheimer's disease stage detection using MRI images</i>	
17h00 17h20	S. HAMDI Department of Computer Science, University of Ferhat Abbas Setif 1, Setif, Algeria <i>Convolutional Neural Network for detecting Alzheimer's disease in the early stages from Magnetic Resonance Imaging</i>	
17h20 18h00	Closing Ceremony	