

## Communications Orales

### Session A-1 : Information Quantique

N°	Titre de la Communication	Nom et Prénom
1	Révélation des corrélations non-classiques, de la cohérence quantique et contrôle de l'incertitude de mesure dans un modèle de spin XY à deux qubits	Ait Chlih Anas
2	Discrimination of entangled and separable Werner states with a quantum extreme learning machine	Assil Hajar
3	Thermal quantum correlations of a fermionic system	Essakhi Mohamed
4	Distribution of distance-based quantum resources outside a radiating Schwarzschild black hole	Elghaayda Samira
5	Étude géométrique d'un système à deux spins avec champ magnétique externe	Boukacem Chaymae
6	Entanglement and Bell non-locality versus quantum-memory-assisted entropic uncertainty relation in two 2-level atoms under the influence of a global environment	Benzahra Mourad
7	Cohérence versus quantum-memory-assisted entropic uncertainty relation of double quantum dots with Rashba spin-orbit interaction	Oumennana Mansoura
8	Geometric measure of quantum correlation and coherence in the Ising-XYZ diamond chain under an external magnetic field	Chouiba Aicha
9	Unveiling Thermal Quantum Correlations in a Two-Dimensional Graphene System Under Decoherence Channels	Bouafia Zakaria
10	Non-classical correlations and coherence in a two-dimensional electron gas under the influence of Rashba spin-orbit coupling	Banouni Chaimae

### Session A-2 : Information Quantique

N°	Titre de la Communication	Nom et Prénom
1	InAs three quantum dots as working substance for quantum heat engines	Ait Mansour Hicham
2	Dynamics of quantum correlation in a two-qutrit Heisenberg XXZ model with Heitler-London and Dzyaloshinskii-Moriya couplings	Adnane Brahim

N°	<b>Titre de la Communication</b>	<b>Nom et Prénom</b>
3	The quantification of correlations in three levels laser systems	Talbi Khalid
4	Controlling transmission and slow/fast light in an optomechanical system with an optical parametric amplifier	Amghar M'Bark
5	Étude des corrélations quantiques dans les systèmes magno-mécaniques	Benrass Noureddine
6	Warped Riemannian metrics for manifolds of two-mode entangled Gaussian states under beam splitting and squeezing unitary operations	Ait Maskour Mouad
7	L'étude des dynamiques des corrélations quantiques sous l'influence combinée des bruits d'amplitude et de phase	Maftah Nawal
8	Quantum simulation	Rochdi Noureddine
9	Corrélations non classiques métrologiques et cohérence quantique dans un système hybride (1/2,1) sous des canaux de décohérence	Chhieb Abdessamie

### Session B-1 : Physique des Particules, Nucléaire, Médicale et Astrophysique

N°	<b>Titre de la Communication</b>	<b>Nom et Prénom</b>
1	Three-body semi-leptonic decay of a charged kaon assisted by a laser field	Baouahi Mourad
2	Decelerating quantum decay processes via strong electromagnetic fields	Jakha Mohamed
3	Étude de la diffusion électron-nucléon sous l'influence d'un champ laser monochromatique	Dahiri Imane
4	Evaluating Time-of-Flight Particle Identification Performance Using ePIC Software at the Electron-Ion Collider	El Ouardi Abdelghani
5	Measurement of light-by-light scattering with the ATLAS detector at the Large Hadron Collider	Ezzobayr Ghizlane
6	Effet du champ électromagnétique sur la désintégration du boson de Higgs chargé dans le modèle deux doublets de Higgs de type II	Said Mouslih
7	Laser-assisted scattering and decay processes in standard model of particle physics	Ouhammou Mohamed
8	Revisiting theoretical constraints in the N2HDM	Taki Bassim
9	Performance of the missing transverse momentum triggers for the ATLAS detector	Zahir Imane

N°	Titre de la Communication	Nom et Prénom
10	Recherche de résonances dimuons de faible masse avec le détecteur ATLAS avec des données de collision 140 fb-1 pp à $\sqrt{s} = 13$ TeV	Lahbabi Fatima Zahra
11	Search for Charged Higgs Bosons in Bosonic Decays with Diphoton Final States with the ATLAS Detector	El Farkh Saad

### Session B-2 : Physique des Particules, Nucléaire, Médicale et Astrophysique

N°	Titre de la Communication	Nom et Prénom
1	Constrained Deflection Angle and Shadows of Rotating Black Holes in Einstein-Maxwell-scalar Theory	Belmahi Hajar
2	On Stability Behaviors of 5D M-theory Black Objects on three-parameter Calabi Yau Geometry	Bouhouche Abderrahim
3	Swampland Statistics for Black Holes	Saad Eddine Baddis
4	Search for Magnetic Monopoles Using the Complete ANTARES Neutrino Telescope Dataset	Eddymaoui Ahmed
5	Diffusion élastique d'un neutrino muonique par un électron en présence d'un champ laser polarisé circulairement dans le cadre de la théorie électrofaible	El Asri Sabrine
6	Evaluation of Alpha and Lithium-7 Energy Release in BNCT : A Geant4 Simulation Approach	CHAREF Khadija
7	Analyse Comparative de la Dosimétrie entre la RC3D et la RCMI pour les Cancers Mammaires Gauches	Chaoufi Ihssane
8	Exploring Nuclear Structure in the Isotopic Chain of Iodine : Insights into Transitional Nuclei Around $A \approx 120$	Badane Hamza
9	MIRD Human phantom external exposure scenarios to ionizing radiation : Modeling with Geant4	Ettoufi Asmae
10	Enhancing Quality Assurance in External Radiation Therapy : A Study on the Use of EPID ASi1200 and ArcCHECK® Phantom in VMAT Plans	Chenhaji Meriem
11	Les coefficients cepstraux de Gammatone avec décomposition empirique (EMD) : une approche hybride pour le diagnostic des maladies cardiovasculaires	Youssef Toulni

### Session C-1 : Physique des Matériaux

N°	Titre de la Communication	Nom et Prénom
1	Investigation of thermodynamic, electrochemical properties, and optoelectronic devices of NaTi2O4 anode material for Na-ion battery : ab-initio calculations	Erraji Abdelkhalek
2	Investigating the physical characteristics of cubic perovskite oxides ( $\text{SrSiO}_3$ ) theoretically	Boufoud Ayoub
3	Theoretical Investigation of New Semiconducting MXenes for Water Splitting via Visible-Light Photocatalysis	DARKAOUI EL Mokhtar
4	Magnetic properties and phase diagrams of 2D mixed Ising model : A Monte Carlo study	Elidrysy Anouar
5	Physical properties of antiperovskite nitrides ( $\text{Zn, In})\text{NCo}_3$ : Density functional theory study and Monte Carlo simulation	Amraoui Smail
6	Strain-engineered 2D h-BC2N monolayer as a potential gas sensor with exceptional sensitivity and selectivity for $\text{NO}_2$ gas detection	Rhrissi Ilyass
7	Structural and microstructural properties of $\text{Ba}_{0.54}\text{Ca}_{0.46}\text{Fe}_{12-x}\text{Al}_x\text{O}_{19}$ ( $x=2.5, 3, 3.5$ and $4$ ) M-type hexaferrite powders synthesized by sol-gel auto-combustion method	Sadik Mohamed
8	Magnetic properties of six-legged spin-1/2 nanotube in presence of a longitudinal applied field	Farchakh Abdeslam
9	Optical and Thermo-Plasmonic Properties of Gold Nanoparticles Near a Graphene Structure	Farkouch Elmahdi

### Session C-2 : Physique des Matériaux

N°	Titre de la Communication	Nom et Prénom
1	Enhancing Solar Cell Efficiency : A Comparative Study of Lead-Free Double Halide Perovskites $\text{Rb}_2\text{XAsBr}_6$ ( $\text{X}=\text{Cu, Tl}$ ) using DFT and SLME Methods	Fatihi Hmad
2	Studying the physical properties of cubic perovskite oxides Based on DFT	Elasri Kamal
3	Exploring rare earth-based scintillators in advanced energy systems through Quantum ESPRESSO	Zaghrane Abderrahmane
4	Characterizing scintillation properties using DFT method	Ouhenou Hakima
5	Grain Growth in Nanocrystalline Ni During Thermal Annealing : A Molecular Dynamics Study	Zouaoui Soukaina

N°	Titre de la Communication	Nom et Prénom
6	Theoretical Study of Magnetic, Magnetocaloric, and Hysteresis Behavior of the Antiperovskite Compound $Mn_3AlN$	Salama Mohammed
7	Investigation of the Physical Properties of Quaternary Heusler $CsNaICl$ : A DFT Study	El Kamli Said
8	Revealing the optoelectronic properties of $AgMgX_3$ ( $X = F, Cl, Br$ ) perovskites using density functional theory (DFT)	Selmani Yassin
9	Study of Oxygen Matter Distribution using Glauber Model	Hasbi Lamyae

#### Session 4 : Intelligence Artificielle, Machine Learning et Mécanique-Energétique

N°	Titre de la Communication	Nom et Prénom
1	IA et trous noirs	El Hadri Wijdane
2	Effects of nanoparticles on unsteady blood flow through artery having both stenosis and aneurysm with magnetic field and body acceleration	El Glili Issa
3	Influence of natural convection during solidification of binary alloy	Akkaoui Hafsa
4	Entropy generation analysis of a hybrid nanofluid during free convection via two concentric cylinders partially filled with porous media and subjected to a magnetic field	Foukhari Youness
5	Analyse des Propriétés physique des Schistes Bitumineux au Maroc	Sghiouri el idrissi Hanane
6	Identification des dynamiques entre NAO et AMO par des techniques de machine learning	Chatir Youssef
7	Quantum Whale Optimization Algorithm (QUWA) For Feature Selection In High-Dimensional Data	Bouamira Safaa
8	Quantum Synthetic Oversampling : A Novel Approach to Address Imbalanced Data Using Quantum Computing	Kamel Hajar
9	Analyse des techniques avancées de traitement du signal pour la séparation aveugle des sources EEG	Oumaima KHADRAOUI

## Communications par affiches

N°	Titre de la Communication	Nom et Prénom
1	Compact and Miniaturized Super Broadband Antenna Based on Textile Substrate for Potential Electromagnetic Energy Harvesting and Other Applications	Douhi Said
2	Etude de certaines propriétés physiques du Co <sub>2</sub> MnGe Heusler : calcul DFT et simulation Monte Carlo	Elhani Ahmed
3	Investigation of the effect of losses on the phase sensitivity of the SU(1,1) interferometer with Kerr state seeding	El Maaroufi Abdelmajid
4	Quantum entanglement and measurement	El Bachiri Kaoutar
5	Role of Substitutional Sb-doping on Stability Structural, Half-metallicity, Elastic, Electronic and Magnetism of Co <sub>2</sub> MnSn Full Heusler Compound	Raia Moulay Youssef
6	First-principles Calculations to Investigate Structural, Electronic and Optical Properties of Rare Earth alloys	Aafi Kanza
7	Combining Density functional theory and Monte Carlo simulation to Study the Electronic, Magnetic, and Magnetocaloric Properties of the quadruple perovskite CaCu <sub>3</sub> Fe <sub>2</sub> B <sub>2</sub> O <sub>12</sub> (B=Re, Os and Ir)	Amhoud Othmane
8	quantum Neural Networks in Tumor Classification	El Aslani Malika
9	Spin polarized effects on Physical Properties of double Perovskite Materials for Spintronic and Thermoelectric applications	Agouri Mohamed
10	DFT investigation of the structural, optoelectronic, thermoelectric, and thermodynamic properties of metal phosphides MP <sub>2</sub> (M = Co, Rh, and Ir)	Chelh Aya
11	Exploring the structural, electronic, and optical properties of CaGa <sub>2</sub> X <sub>4</sub> (X = S, Se) chalcogenide spinels for potential solar cell applications : DFT study	Jamaï Ibtissam
12	AI-Assisted 2.7 μm Lasing in Er <sup>3+</sup> -Doped Tellurite Fiber Lasers with Different Pumping Schemes	Jouah Hamid
13	Overview of Energy Storage techniques : addressing Materials and Manufacturing Challenges	Waqdim Abderrahmane
14	Comparative Analysis of Reflectivity and Pumping Schemes on the output power of Tm <sup>3+</sup> -Doped Fiber Lasers at 1.72 μm	Zaki Mohamed
15	Entanglement within a graphene layer with a scattering process under thermal fluctuations	Bouafia Zakaria

N°	<b>Titre de la Communication</b>	<b>Nom et Prénom</b>
16	Investigation of electronic, thermodynamic, and optical properties of LiTi <sub>2</sub> O <sub>4</sub> cathode material for Li-ion battery : An Ab Initio calculations	Erraji Abdelkhalek
17	RELATION ENTRE LA DURABILITÉ CHIMIQUE, LA STRUCTURE ET LE CARACTÈRE ION-COVALENT DES LIASONS P-O-ME (ME=Pb, Fe) DES VERRES DU SYSTÈME TERNAIRE Fe <sub>2</sub> O <sub>3</sub> -PbO-P <sub>2</sub> O <sub>5</sub>	Radouan Makhlouk
18	Pressure-Driven Intrinsic Quantum Confinement and Semiconducting-to-Metallic Transition in the Topological Flat Bands Kagome Nb <sub>3</sub> Cl <sub>8</sub> compounds	Bouhmouche Ayoub
19	Aluminum Substitution Effects on the Structure and Morphology of SrFe <sub>12-x</sub> Al <sub>x</sub> O <sub>19</sub> Hexaferrites	ELKHOUAD Soukaina
20	Structural and optical properties of Eu <sub>2</sub> O <sub>3</sub> -ZnO composite prepared by solid state method	El gharbi Abdelfattah
21	Studying quantum coherence and non-classical correlations in two non-interacting two-level atoms within thermal reservoirs	Mourad Benzahra